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RISKS AND BENEFITS OF TEAM & ORGANIZATIONAL COMMITMENT FOR
CONFLICT HANDLING AND EMPLOYEE EFFECTIVENESS

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1 Introduction

Employee commitment plays a central role in retaining employees and enhancing organizational performance. Keeping employees committed has become a top priority especially in European and other Western countries where declining birth rates have caused a shortage of skilled labor, and voluntary fluctuation has become commonplace (ManpowerGroup, 2015). More and more companies are thus implementing change initiatives and employee retention programs such as “great place to work” to strengthen their emotional appeal as an employer (Carvalho & Areal, 2015; Fulmer, Gerhart, & Scott, 2003). When building employee commitment in this way, however, the question arises as to what targets or foci of commitment are most relevant for employee performance and thus worthy of promotion. Organizations, especially large ones, are rarely homogeneous. They are functionally and structurally diversified in terms of departments, workgroups and teams that differ in their use of language, logos, dress, rituals and other organizationally relevant symbols. This differentiation sets the stage for the development of distinct team commitments that may exist relatively independently from commitment to the organization as a whole. As research has shown, individuals are capable of maintaining meaningfully distinct levels of team and organizational commitment, and each commitment has a unique impact on employees' experience and behavior at work (Franke & Felfe, 2008; Riketta & van Dick, 2005).

In light of today's trend in organizations toward more decentralized and team-based structures, commitment scholars have increasingly argued that the promotion of team commitment may be more viable than the promotion of organizational commitment, because team commitment is more closely associated with group-oriented behavior, innovation, and team performance (Cohen, 2003; Foote & Tang, 2008; Galletta, Portoghese, Coppola, Finco, & Campagna, 2014; Ganesh & Gupta, 2015; Klein, Molloy, & Brinsfield, 2012; Lu, Samaratunge, & Härtel, 2013; S. Park, Henkin, & Egle, 2005; Pearce & Herbig, 2004). What is rarely examined, however, is how team and organizational commitment combine and interact to affect employee outcomes. So far, most studies have looked at one commitment at a time, and no attention has been paid to the potential risks that may result when employees feel unilaterally committed to a single target (i.e. the organization or the team). In fact,

findings from the related literature on identification indicate that strong ingroup feelings such as team commitment can be a source of interteam rivalry and conflict, and thus not always beneficial for organizational performance. The promotion of higher-order attachments such as organizational commitment is advocated to harmonize interteam relations and reduce the risk associated with strong subunit attachments. However, the identification literature remains silent as to how employees behave in interteam conflict situations if they feel attached to the organization but *not* to the team. Given that such constellations also exist (e.g. Nguyen, Felfe, & Fookun, 2015), there is a need to understand their implications for conflict and performance, too.

1.1 Research Aim and Objectives

The promotion of employee commitment, especially in large and complex organizations, requires a thorough understanding of the interplay of team and organizational commitment, both in terms of the benefits and the potential risks associated with specific commitment patterns. Considering the dearth of literature on this topic, the major aim of this thesis is to systematically analyze and compare the two commitments in terms of their *joint* impact on relevant workplace outcomes (i.e. interteam conflict handling, citizenship behavior, efficacy beliefs, and turnover intentions).

Prior to investigating this issue, however, there will be in-depth review of the commitment literature with a particular focus on Europe. In light of Europe's skilled labor shortage and increasing voluntary turnover, the thesis first wants to give an overview of how committed European workers are toward their organization, and whether there are relevant differences between countries and regions (**Objective 1**). While similar reviews have already been carried out for North American or China (Meyer et al., in press), the thesis will analyze the specific European situation based on evidence from meta-analyses, international surveys and cross-country studies. The overview can serve European employers as a benchmark to see how they fare with respect to the broader commitment situation, and how external factors such as culture, personal values and the economic situation may help explain cross-country variations. Given that most existing research (in Europe or elsewhere) has focused on commitment to the organization as a whole, meaningful conclusions about commitment levels and country

differences within Europe can only be drawn with respect to this attachment target. The focus of the review will thus be on employees' organizational commitment.

Following the review, the thesis sets out to broaden the understanding of the implications of commitment in the workplace by looking at the interplay of team and organizational commitment and its effects on employee outcomes. First and most importantly, there will be an examination of how team and organizational commitment interact to affect employees' preferences for different interteam conflict management strategies (i.e. Dominating, Integrating, Obliging, Avoiding) (**Objective 2**). Conflict between organizationally nested teams is a ubiquitous phenomenon in organizations, arising from competition over scarce resources and differences in aims and value orientations (Rahim, 2011). For example, production teams' concern for cost factors regularly collides with sales teams' preference for speedy delivery of goods to customers. Similarly, R&D teams' focus on developing new and innovative products often collides with marketing teams' focus on products for which customer demand exists or can be generated. This thesis puts forward and tests the proposition that, in interteam conflict situations requiring mutual cooperation, if one commitment is high and the other is low, employees will tend towards suboptimal or even dysfunctional interteam conflict management strategies with negative consequences for the organization. By contrast, if both commitments are high ("dual commitment"), strategies beneficial to the organization are likely to result.

Besides interteam conflict handling, the thesis will look at how team and organizational commitment combine to affect employee performance outcomes (**Objective 3**). Different commitment constellations will be systematically compared in terms of their impact on employee citizenship behaviors, efficacy beliefs, and turnover intentions. As with interteam conflict handling, it is proposed that these outcomes are most effectively served if employees feel dually committed to both their organization and their team.

In summary, the objectives of this thesis are:

- Providing an overview of what is known about employee commitment from a specific European perspective;

- Investigating how employees' interteam conflict management, performance, and turnover intentions are affected by different combinations of team and organizational commitment.

The results of this investigation may have important implications for building and maintaining employee commitment in organizations, especially those that are centered around teams. The thesis will discuss the managerial applications of the research findings and suggest concrete ways of changing potentially detrimental employee commitment patterns.

1.2 Thesis Structure (Study Framework)

Figure 1 outlines the structure of this thesis and the underlying research approach. **Chapter 2** defines commitment based on Meyer and Allen's (1991) widely adopted three-component model. This model recognizes different forms of commitment (i.e. affective, normative, and calculative) that may be experienced in relation to different targets (i.e. organization, team, etc.). Given the strong conceptual and empirical overlap between affective commitment and the related concept of identification, Chapter 1 will also briefly address the differences between the two constructs.

Chapter 3 provides an overview of the situation of employee commitment in Europe. Based on the three-component model, it describes and compares levels of organizational commitment in different European countries and regions, and provides tentative explanations as to why the differences are as observed with reference to culture, economy and personal factors. The methodological challenges and limitations underlying the review are presented. Furthermore, the chapter highlights specific issues that are currently addressed by European scholars, namely how commitments to different targets combine and interact with regard to important workplace outcomes.

Taking up the line of research on multiple commitments, **Chapter 4** looks at interteam conflict in the organization and puts forward several hypotheses as to how employees' preferences for different conflict management strategies (i.e. Dominating, Integrating, Obliging, Avoiding) are affected by different patterns of team and organizational commitment (i.e. low-low, low-high, high-low, high-high). Two studies were conducted to test these hypotheses. Study 1 involved a field experiment to allow a rigorous testing of causal

directions. Study 2 involved a survey to cross-validate and generalize the experimental findings. After presenting the two studies, their results will be compared and discussed, and their limitations be outlined.

Chapter 5 moves beyond interteam conflict and looks at how other important workplace outcomes are affected by different commitment constellations. Hypotheses are developed and tested based on survey evidence (study 3). The results are presented and their limitations are outlined.

Chapter 6 summarizes the findings from Studies 1, 2, and 3, and discusses their broader theoretical and practical implications. The chapter also provides important directions for future research.

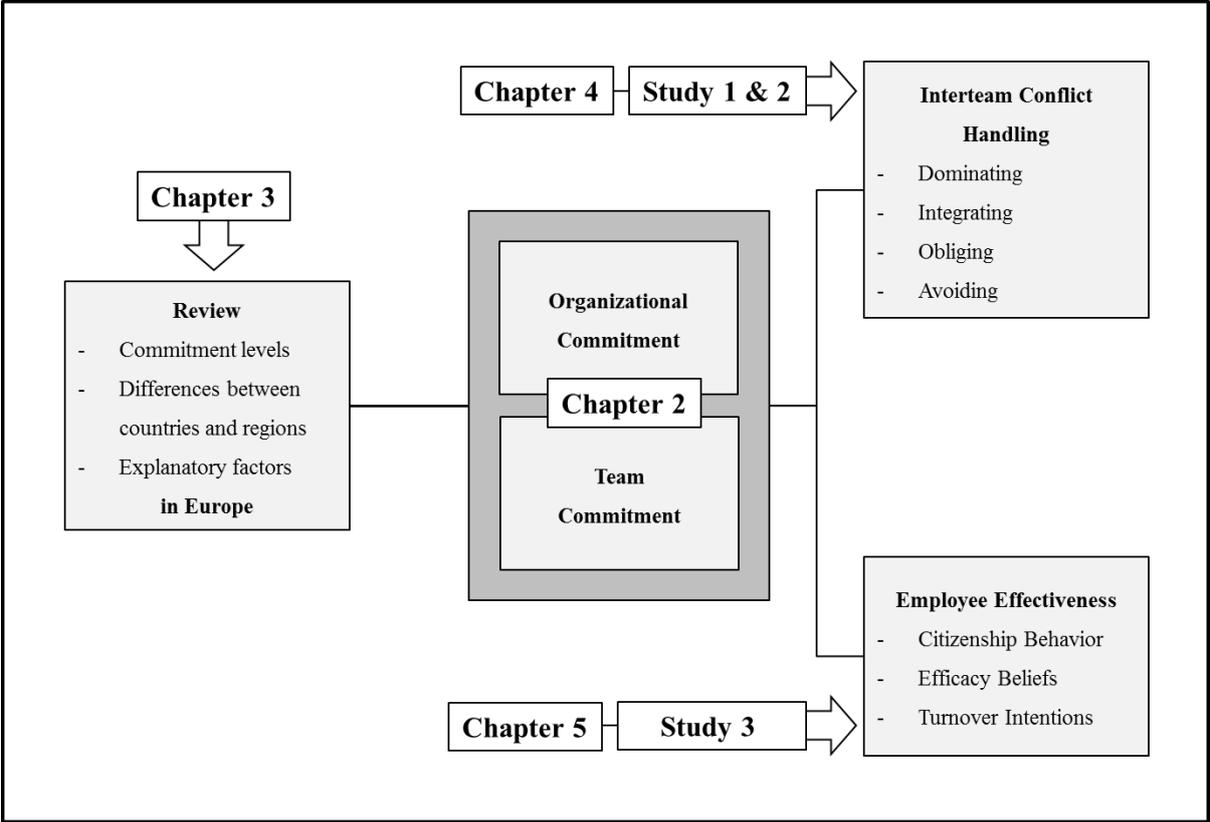


Figure 1: Thesis Structure and Research Framework

2 Commitment to the Team and the Organization

Employee commitment can be generally defined as "a force that binds an individual to a course of action of relevance to one or more targets" (Meyer & Herscovitch, 2001, p. 301). According to Meyer and Allen's three-component model, this force may be experienced in different ways, namely as an affective (AC), normative (NC) or continuance (CC) commitment. Affective commitment refers to the emotional attachment to, identification with, and involvement in the target ("want to"). Calculative commitment denotes the perceived costs associated with leaving the target ("have to"). Finally, normative commitment means a moral obligation to remain with the target ("ought to"). The focus of this thesis is on affective commitment because it has been identified as the strongest and most reliable predictor of beneficial workplace outcomes (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Hence, unless otherwise stated, where the term commitment is used, it refers to the affective form. However, the review of commitment in Europe (chapter 3) will also encompass the other two components to draw a more comprehensive picture.

By definition, affective commitment includes identification with the target as an important element. Nevertheless, a distinction is often made in the literature between identification and affective commitment. Although the two concepts are typically highly correlated, they stem from different research traditions and thus present different perspectives on how the bond emerges. Whereas identification is defined as an individual's perception of oneness with a group driven by affiliation, self-enhancement and uncertainty reduction needs (Ashforth & Mael, 1989; Hogg & Terry, 2000), commitment is conceived of as an affective force that binds individuals to favorable actions toward the group in line with the group's values and goals (Meyer & Herscovitch, 2001). In their integrative process model, Meyer, Becker, and van Dick (2006) have argued that self-defining as a group member is a necessary but not sufficient precursor to developing a motivation to act on the group's behalf such as commitment. In support of this view, a recently published series of longitudinal analyses found that organization-directed identification and affective commitment are part of a causal chain where common antecedents (e.g. perceived organizational support) predicted organizational identification, which in turn influenced affective commitment as the more proximal determinant of common outcomes (e.g. turnover) (Stinglhamber et al., 2015). In

light of these results, this thesis focuses on affective commitment rather than identification. Nevertheless, it will incorporate important concepts and theories from the identification literature to support its theorizing and hypotheses development.

As outlined in the introduction, the targets of interest in the thesis are the team and the organization. While commitment to other targets also exist (e.g. supervisor, clients, occupation, or form of employment), team and organizational commitment are arguably the most basic workplace attachments. Distinguishing between them has shown to be of value because it allows differential predictions of work-related outcomes to be made (Riketta & van Dick, 2005). Furthermore, there is evidence that the different commitments may exist relatively independently of one another (Becker & Billings, 1993; Reichers, 1986; Vandenberghe, Bentein, & Stinglhamber, 2004). Moderate correlations between team and organizational commitment suggest that individuals are capable of maintaining meaningfully distinct levels of commitment to both targets (Franke & Felfe, 2008; Riketta & van Dick, 2005). This thesis will demonstrate that unilateral commitments to the team or the organization are in fact commonplace. The term "team" is used here in a broad sense to denote any organizational subunit that is part of the formal structure of the organization, including workgroups, departments, project teams or local operations. While the academic literature prefers the term workgroup, this thesis uses the term team because groups in organizations are often referred to as teams.

3 Commitment in Europe

This chapter aims to provide an overview of the situation of employee commitment in Europe. Drawing on the three-component model of commitment (Meyer, Allen & Smith, 1993) as an affective, calculative and normative force, it will address the following questions: How committed are employees in Europe toward their organization? Are there relevant differences across countries and regions, and how does Europe compare with other regions in the world? To what extent does culture account for these differences? What can be said in terms of antecedences and consequences of commitment in Europe, and are there specific research issues that have been addressed by European scholars? Answering these questions will contribute to a better understanding of the phenomenon from a specific European perspective, and thereby add to the growing body of research that applies the three-component model across geographical and cultural borders.

3.1 Commitment levels

The following review of commitment levels in European countries (3.1.1) and regions (3.1.2) is based on cross-national comparison studies and meta-analytic reviews that include samples from a large number of European countries. The focus of the review is on affective commitment (AC) as the most widely studied and arguably most beneficial form of commitment. Regional clusters will also be compared in terms of the two other commitment components (i.e. CC and NC). In terms of target, the review will focus on commitment to the organization as a whole. Studies on team commitment also exist, but they are too few in numbers to warrant reliable cross-country comparisons. As will be shown, the overall picture is rather heterogeneous. Nevertheless, some patterns of differences can be identified.

Given that much of the existing evidence is based on cross-sectional studies that were aggregated from the individual to the country level, a note of caution is in order prior to the review. Inferences about a country's commitment level based on aggregated data that is gathered from heterogeneous samples at different time points does not account for changes over time. Longitudinal studies that could trace such changes are rare. Furthermore, cross-level inferences are predicated on the assumption that the findings from a specific sample or aggregate of samples are representative of the country from which they were taken.

Isomorphism may be a reason to justify this inference (Fischer, Vauclair, Fontaine, & Schwartz, 2010). However, factors other than country origin such as industry, demographics, economy, working conditions, and so on provide alternative explanations for the observed country differences.

To reduce the risk of fallacious inferences (from individual-level studies to country characteristics), this review includes findings from representative cross-national surveys (e.g. European Social Survey) and from studies comparing commitment among national subsidiaries of international organizations that may be more homogeneous.

3.1.1 Differences between countries

A total of nine studies were identified that address commitment differences among European countries. Of these, four involve homogeneous samples (study 1 - 4); four are based on international comparative survey data (study 5 to 7); and two are meta-analytic studies (study 8 and 9). To facilitate comparison, means from these studies were converted into a scale indicating the percentage of maximum possible scores (see Fischer & Mansell, 2009; Meyer et al., 2012). These scores range from 0 to 100 (with 50% as the midpoint) and are displayed in Table 1. Reference to the studies will be made through their respective number in the Table.

3.1.1.1 Homogeneous Samples

Studies 1 to 4 are based on samples that are homogeneous with respect to occupation or employer: study 1 (Vandenberghe, Stinglhamber, Bentein, & Delhaise, 2001) compared N = 580 translators from 12 countries working for the European Commission in Brussels, with subsample sizes ranging from N = 21 for the Netherlands to N = 61 for England; study 2 (Glazer, Daniel, & Short, 2004) compared commitment levels among N = 958 nurses in Hungary, Italy and the UK; study 3 (Hattrup, Mueller, & Aguirre, 2008) obtained OCA data from 4,288 workers of an automotive company with local operations in seven countries; and study 4 (Eisinga, Teelken, & Doorewaard, 2010) included N = 723 university employees from economics and business departments at 18 universities in six European countries. Due to the relative equivalence of the sampled occupations and employing organizations, it may be

Table 1: *Affective Organizational Commitment (OCA) for European Countries*

| Study | Homogeneous Samples | | | | Representative Surveys | | | Meta-analyses | |
|----------------|------------------------------|-------------------------|-------------------------|--------------------------|------------------------|-------------------------|------------------|----------------------------|------------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Author (date) | Vandenbergh et al. (2001) | Glazer et al. (2008) | Hatrup et al. (2008) | Eisinga et al. (2010) | Six & Felfe (2006) | Hatrup et al. (2008) | Koster (2011) | Fisher & Mansell (2009) | Meyer et al. (2012) |
| K | 14 | 3 | 6 | 7 | 13 | 15 | 19 | 76 | 184 |
| N | 580 | 958 | 4,288 | 723 | > 6,000 | 7,078 | 18,522 | 24,754 | 120,970 |
| Austria | | | | 75.0 | 70.0 | | 59.8 | | 65.7 |
| Belgium | 70.4 | | 58.7 | | 71.6 | | 61.8 | 55.8 | 53.7 |
| Bulgaria | | | | | | 63.4 | | 68.3 | |
| Czech Republic | | | | 72.4 | | 63.2 | 46.6 | | |
| Croatia | | | | | | | | 64.2 | |
| Denmark | 59.8 | | | | 80.2 | 68.8 | 61.0 | 57.4 | |
| Finland | 68.2 | | 59.2 | | | | 55.0 | 66.5 | 43.4 |
| France | 73.2 | | | 70.8 | 67.8 | 57.4 | 54.0 | 66.5 | 55.9 |
| Germany | 70.4 | | 57.1 | 75.8 | 69.0 | 64.4 | 60.8 | 57.8 | 51.7 |
| Greece | 71.0 | | | | 69.8 | | 56.8 | | 60.3 |
| Hungary | | 59.5 | | 74.4 | | 62.6 | 56.4 | 54.0 | 59.5 |
| Ireland | | | | | 75.0 | | 57.2 | 40.0 | 41.9 |
| Italy | 67.0 | 53.7 | | 71.0 | 64.8 | | 50.2 | 58.8 | 58.9 |
| Netherlands | 68.8 | | 58.1 | | 72.2 | 65.0 | 54.8 | 60.5 | 67.0 |
| Norway | | | | | | 65.4 | 57.6 | 59.6 | 70.9 |
| Poland | | | | | | 59.6 | 49.2 | 64.3 | 57.2 |
| Portugal | 67.8 | | | | 70.0 | 71.0 | 62.0 | 60.7 | 69.5 |
| United Kingdom | 73.0 | 53.2 | 57.3 | 65.8 | 70.8 | 63.6 | 53.8 | 60.7 | 54.8 |
| Romania | | | | | | | | | 63.6 |
| Slovenia | 61.6 | | | | | 62.8 | 52.8 | | |
| Spain | 61.6 | | | | 66.4 | 64.0 | 54.2 | 45.5 | 62.6 |
| Sweden | 62.8 | | 56.5 | | 73.6 | 61.8 | | 58.2 | 46.1 |
| Switzerland | 67.2 | | | | | 67.2 | 61.8 | | 76.0 |

K = Number of independent samples from European countries; N = Cumulative sample size

argued that the observed cross-country differences are attributable to country origin rather than other factors (Eisinga et al., 2010). However, translation, nursing and university occupations are not necessarily representative of other job areas, and generalizability is restricted due to small subsample sizes. Furthermore, country of origin may be confounded with employment as not all employees who work in a given country necessarily share that country's origin. Cross-national comparisons are thus valid only within the context in which the studies were conducted. Nevertheless, a common thread running through all four studies is the considerable variation of commitment levels within countries. For example, the scores for the United Kingdom range from a low of 53.2% (university workers) to a high of 73.0% (translators). Similarly, Germany ranks top (75.8%) in the automotive sample, but comes second last (57.1%) in the study of university employees. A more extensive study in Germany (Felfe & Franke, 2012a; not shown in the table), which validated the German version of the Allen and Meyer (1990) scale among 10'000 employees, revealed considerable differences in commitment levels between private-sector organizations (74.0%) and public organizations (66.0%), and between employees with leadership positions (75.0%) and those without (68.8%). These examples indicate that there is substantial within-country variation of commitment levels. Hence when we analyze more representative country data in the next paragraph, it must be kept in mind that there is no direct causal inference from country origin to the individual worker or organization.

3.1.1.2 Representative surveys

Studies 5, 6 and 7 are based on representative cross-country surveys conducted at different time points. Although retrieved from different sources (i.e. International Social Survey ISS, Eurobarometer EB, European Social Survey ESS), the findings are comparable because the measures used to collect the data in each study bear close resemblance to items included in Allen and Meyer's (1990) OCA scale (e.g. 'I am proud to be working for my firm or organization', 'I think my values are similar to those of my organization'). Only the ESS data is based on a single-item measure asking whether a respondent would turn down a job with higher pay to stay with the current organization. Agreement with this item can be indicative of both high affective commitment and low continuance commitment.

Study 5 (Six & Felfe, 2006) analyzes data from the 1995 standard Eurobarometer survey which included 6,028 full-time employees working in various positions, occupations and industries. The observed OCA scores range from 66.4% for Spain to 80.2% for Denmark. Study 6 (Hatrup et al., 2008) reports OCA levels of 7,078 workers from 19 European countries using data from the 1997 Work Orientations II Module of the ISS. The observed commitment scores range from 57.4% for France to 71.0% for Portugal. Besides Portugal, high scores were also observed for Denmark (68.6%) and Switzerland (67.2%). Poland's score was comparatively low (59.6%), similar to that of France. Study 7 (Koster, 2011) uses the 2004 ESS survey data with 18,522 employees from 26 European countries. The observed commitment scores range from 50.2% for Italy to 62% for Portugal. The ESS scores are thus lower, on average, than the ISS and EB scores presumably because they are derived from a single-item measure that does not clearly differentiate between OCA and OCC. Meta-analyses show that OCN and OCC levels are typically lower than OCA levels across commitment studies (Meyer et al., 2002).

Overall, there are seven countries that were included in all three studies: Denmark, France, Germany, Netherlands, Portugal, Spain, and the United Kingdom. When examining these countries, two important observations can be made (cf. Table 2). First, the relative positions of the countries are rather similar in studies 6 and 7 (Spearman's $\rho = .93$) and somewhat similar in studies 6 and 5 (Spearman's $\rho = .54$). Denmark ranks consistently at the top, Germany in the middle, and France and Spain appear at the lower end. It is thus conceivable that the relative positions of these countries reflect real-world differences in their overall commitment levels. As stated before, however, there may be considerable variation within the countries and over time, and direct causal inferences from the national to the organizational or even individual level are unwarranted.

3.1.1.3 Meta-analyses

In addition to the cross-national and representative survey studies, there are two international meta-analyses (studies 8 and 9) that allow comparisons among European countries to be made. Study 8 by Fischer and Mansell (2009) investigated affective commitment across 49 countries, of which 19 were European. The data set including European countries consisted of 76 independent samples with a total N of 24,754. However, the commitment scores for most

European countries were derived from only a few studies with small sample sizes, which precludes conclusions about these countries' overall commitment levels. Only the scores for Belgium (55.8%), Germany (57.8%), the Netherlands (60.5%) and the United Kingdom (60.7%) are calculated from a larger number of independent samples (10, 13, 7 and 14 respectively) and may thus be a somewhat more reliable estimation of these countries' commitment levels.

A more recent meta-analysis by Meyer et al. (2012) examined affective commitment among 20 European and more than 30 other countries (study 9). The scores for the European countries are based on 84 independent studies with a total N of 120,970. Unlike Fischer and Mansell (2009), Meyer et al. (2012) analyzed only those studies that were measuring commitment as conceptualized within the three-component model, thus increasing the comparability of their findings both across countries and with the more representative survey findings above (i.e. studies 5, 6, and 7). A larger number of independent samples was available for Belgium (32 samples), France (10 samples), Germany (20 samples), the Netherlands (40 samples) and the United Kingdom (25 samples). The mean affective commitment for these countries were 52.6% for the UK, 53.7% for Belgium, 55.9% for France, 62.3% for Germany, and 67.2% for the Netherlands (see Table 1). With the exception of Belgium, these countries were also included in the representative surveys. The observed relative positions are somewhat similar to those in study 5 (Spearman's $\rho = .43$) and study 6 (Spearman's $\rho = .60$). There is again a lower level in France, while the levels for Germany and the Netherlands are higher. Due to measurement equivalence it may be speculated that there are systematic differences across countries that are attributable to national culture and other country-level characteristics.

Overall, it has to be stated that the results of the different studies are difficult to compare due to differences in measurement, sampling procedures, type of controls, and possible changes in commitment over time that cannot be captured by cross-sectional studies. As there seems to be some consistency when representative surveys are used, however, there is reason to believe that some of the observed cross-country variation is systematic and therefore attributable to country-level factors such as national culture and economic situation. We will explore this possibility in more depth in section 3.2. below.

3.1.2 Differences between regions

For a better overview, Meyer and colleagues (2012; study 9) clustered the countries in their meta-analysis based on the GLOBE cultural taxonomy (House, 2004; Javidan, House, Dorfman, Hanges, & Sully de Luque, 2006). Compared to other regions in the world, Europe covers a wide range of clusters (i.e. Nordic Europe, Germanic Europe, Eastern Europe, Latin Europe, and Anglo), indicating that commitment on this continent may be subject to various cultural influences. With regard to OCA, for example, European clusters are found in both the top position (Germanic Europe with Austria, Netherlands, Belgium, Switzerland and Germany has a score of 66.8%) and the last position (Nordic Europe with Denmark and Sweden has a score of 49.0%). Moreover, all European clusters except for the Nordic cluster obtain higher OCA scores than the Anglo cluster (US, UK, Canada: 55.1%). However, it has to be acknowledged that the clusters are not homogeneous. For example, the relatively high score of Germanic Europe may be upward biased by Dutch (67.2%), Austrian (65.7%) and Eastern German samples (67.7%), while the Western German score was found to be lower (51.7%). In their study among 10'000 German employees, Felfe and Franke (2012) obtained a mean level of 64.3% for overall German OCA, and this may be an appropriate reflection of the average German level combining East and West Germany.

In sum, employees in Nordic Europe show lower levels of OCA compared to other European regions and compared to the Anglo and Confucian Asia cluster. While the average level across all clusters is highest in Germanic Europe, Eastern and Latin Europe also show higher levels than the Anglo cluster. Hence, except for Nordic Europe, OCA seems to be higher in Europe than in the Anglo countries.

With regard to the three-component model of commitment, it is also important to examine differences in OCC (continuance) and OCN (normative). Of the studies with homogeneous samples, for example, Vandenberghe et al. (2001; translators) and Glazer et al. (2004; nurses) found some evidence of cross-national differences in OCC, whereas Eisinga et al. (2010; university employees) did not. Conversely, Eisinga et al. (2010) found some differences in OCN whereas Vandenberghe et al. (2001) and Glazer et al. (2004) did not.

For a better overview, Figure 1 displays the commitment profiles (OCA, OCC, OCN) for the different GLOBE regions based on Meyer et al.'s (2012) meta-analysis. The results show somewhat similar but also different patterns for OCC in comparison to OCA. Overall, the mean scores for OCC are generally lower than for OCA, and there is also less variation in OCC than in OCA and OCN. The Germanic and the Eastern European clusters show the highest levels of OCC, and the Nordic cluster OCC is higher than that of the Anglo and the Confucian Asian cluster. The lowest OCC score was observed for Latin Europe. Franke and Felfe's (2012) study among more than 10.000 German employees found that OCC levels were contingent on age (higher OCC among older employees), higher in public than in private organizations, and lower among leader than non-leaders, indicating systematic variation within countries. Overall, OCC appears to be higher in European regions than in most other regions of the world.

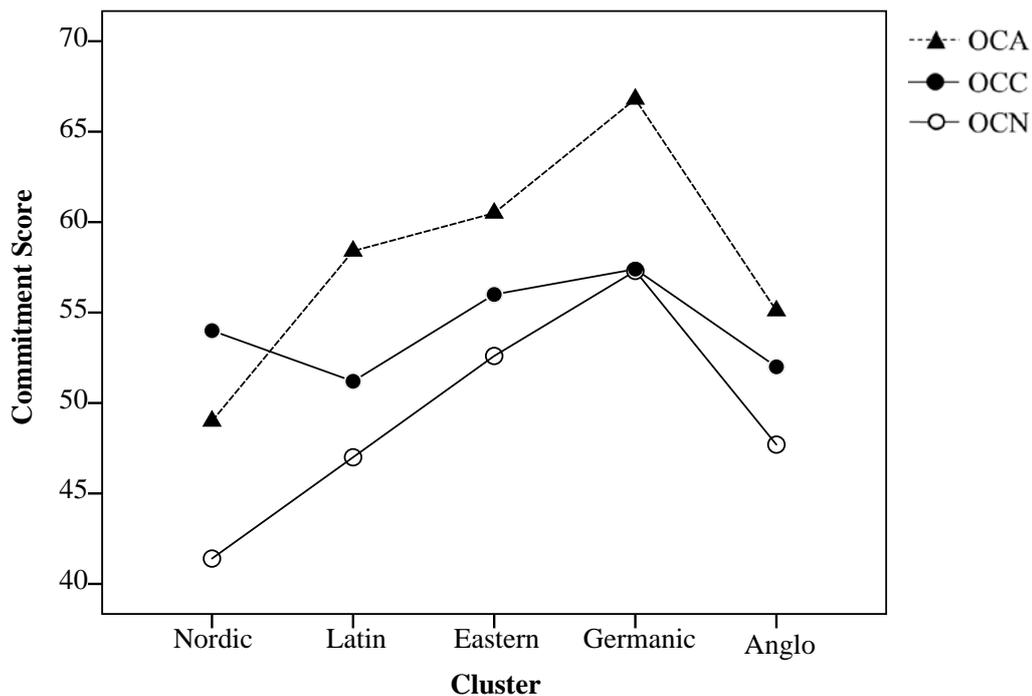


Figure 2: Commitment profiles across European GLOBE clusters (based on Meyer et al., 2012)

With respect to OCN, Meyer et al.'s (2012) meta-analysis reveals generally lower levels than for the other two commitment forms. The lowest levels are found in Nordic and Latin Europe

whereas Eastern and Germanic Europe yielded higher levels. The score of the Germanic cluster is mostly represented by employees from the Netherlands (57.8) and may thus be upward biased. In contrast, the results from Felfe and Franke (2012) with German employees clearly indicate a lower level (43.0) of OCN for Germany.

Overall, the comparison of profiles reveals that, except for Nordic Europe, there are relatively high levels of OCA, lower and more homogeneous levels of OCC, and clearly lower levels of OCN for all European culture clusters. Germanic and Eastern Europe show higher levels than other European and Non-European regions (Anglo and Confucian Asia). The Latin cluster is relatively similar to the Anglo and to the Confucian Asia cluster, albeit closer to the Anglo cluster with regard to OCN, and closer to the Confucian cluster with regard to OCA.

3.2 The influence of culture, personality and economy

As pointed out in the previous section, there is evidence for moderate but substantial differences in commitment levels across countries worldwide and also between European countries and regions. Many studies have tried to explain these differences based on cultural values, typically as conceptualized by Hofstede (2001) and related frameworks (House, 2004). A few studies have also investigated the effects of economic welfare (e.g. gross domestic product) and personality traits (e.g., positivity, happiness and life satisfaction) that are supposed to vary systematically between countries. In general, these effects can be examined at three levels of analysis: 1) the country level, 2) the individual level, and 3) in terms of the interaction between the country and the individual level. 1) At the country level, it is assumed that members of the same culture are exposed to similar contextual influences. Hence there should be systematic differences between countries that can be studied at the country level (e.g., there is a higher level of normative commitment in collectivistic countries than in individualistic countries). 2) Although a majority of individuals within a culture share the dominant values of that culture (Oyserman, Coon, & Kemmelmeier, 2002), the individual-level perspective takes into account that there may be considerable variation within countries because of differences in the degree to which cultural values are accepted or internalized by individuals (Triandis, 1995). Individuals may thus be more or less collectivistic just as they may be more or less committed. Collectivistic individuals, for example, are typically found to have higher normative commitment than individualistic individuals (Clugston, Howell, &

Dorfman, 2000; Felfe, Schmook, & Six, 2006). 3) Finally, both the country and the individual level may interact (cross-level interaction): the relationship between cultural values and commitment or between commitment and its antecedences and consequences on the individual level may be affected by country-level characteristics that act as contextual influences (Felfe, Yan, & Six, 2008). In the following, we will summarize research on commitment relationships with cultural values and other explanatory factors at all three levels of analysis. While most of this research has been conducted from a worldwide perspective, we will try to provide an overview from a European perspective. Our focus is thus on meta-analytic reviews, cross-national comparisons, and individual-level value studies with European samples.

3.2.1 Country level

From a theoretical point of view, there is no complete consensus on the implications of culture for commitment. Some authors have argued that OCA and OCC should be positively related to collectivism because of the emphasis on social ties and group identity (e.g., Felfe, Yan, et al., 2008; Randall, 1993; Wasti & Önder, 2009). Others expect a positive relationship with individualism because employers put more effort on individual needs fulfillment, and individualistic values may enhance rational relationships (e.g., Fischer & Mansell, 2009; Gelade, Dobson, & Gilbert, 2006). As for OCN, there appears to be agreement that countries with collectivistic value orientations should show higher levels of commitment due to the importance placed on loyalty, obligation and duty.

That said, empirical research so far has failed to provide consistent findings. Fischer & Mansell's (2009) meta-analyses of 49 countries (including 18 European countries) showed a positive relationship between collectivism and OCN and between power distance and OCN. Collectivism was also positively associated with OCA, albeit only when considering GLOBE's 'in-group collectivism' and not Hofstede's (2001) individualism-collectivism scores. Similarly, large-scale surveys found no evidence of a relationship between country-level OCA and Hofstede's individualism-collectivism dimension (Hattrup et al., 2008; Hausmann, Mueller, Hattrup, & Spiess, 2013). For example, in their worldwide employee opinion poll with N = 93.055 participants from the automotive industry and 24 nations (including 16 European nations), Hausmann et al. (2013) only found a marginal positive

effect for individualism on OCA after controlling for economic welfare (as measured by the Human Development Index), acquiescence bias, job satisfaction, and other variables. Based on their own and other studies, these authors concluded that there is only little support for a systematic relationship between national differences in OCA and Hofstede's cultural dimensions. Clearer support for both a positive relationship between OCA and measures of collectivism, and a negative relationship between OCA and measures of individualism, is provided in Meyer et al.'s (2012) meta-analysis comparing 50 countries (including 20 European countries). In line with previous research, Meyer and colleagues (2012) were able to show that correlations differed depending on how collectivism is conceptualized and measured: a significant correlation was found for Schwartz's (1992) "embeddedness" and GLOBE's (2004) "in-group collectivism" scores, but not for Hofstede's (2001) individualism-collectivism dimension. It was thus concluded that OCA levels differ between countries where collectivistic values center on family (e.g. Spain, Italy) and countries where the values extend to larger institutions. As for the other two commitment forms, Meyer et al. (2012) found a positive relationship between OCN and both collectivism and power distance, but no relationship for OCC.

All in all, with regard to national culture, it appears that there is a positive association between collectivism and both OCA and OCN, and between power distance and OCN, when using the Schwartz or GLOBE value taxonomies. Although the effects are rather small, they can be shown when controlling for different economic and job variables. As the number of European countries in these worldwide studies is substantial, it can be assumed that the findings also apply to Europe.

Besides cultural values, studies also compared countries in terms of the influence of economic welfare and personality traits on commitment. For example, Hausmann et al. (2013) used the Human Development Index (HDI; which is a composite statistic of life expectancy, education, and income indices) as an indicator of economic welfare, and found generally lower levels of OCA in countries with high HDI scores. Likewise, Fischer and Mansell (2009) found that current income per capita and economic growth per capita were negatively associated with both OCA and OCN. The authors explained this finding by arguing that individuals in less economically developed countries are more likely to grow up with greater social

interdependencies. The obligation of those who are employed to support family members is likely to increase normative pressures to stay with their employer. Similarly, affective ties become more important as the membership to relevant groups is important for job security and promotion. On the other hand, economic welfare is associated with more opportunities and individual independence which results in weaker affective ties and decreased affective commitment.

A contrasting argument is presented by Gelade et al. (2006) who analyzed secondary data across 49 countries (including 19 European countries). Although their study revealed no significant correlation between OCA and national income per capita, the authors argued that independence in more economically developed countries is associated with greater freedom to choose a satisfying job and employers that fulfill higher-order needs for self-esteem, perceived competence, and so forth. Consequently, OCA should be stronger in countries with a developed economy, whereas poor economic conditions should enhance OCC. In support for their argument, the authors were able to find a negative relationship between OCA and unemployment rates and a positive relationship with male economic activity rates. It was thus concluded that positive socio-economic conditions have a statistically significant but only marginal positive effect on OCA.

Gelade et al. (2006) also investigated the effects of personality traits on commitment at the country level. They found positive relationships between OCA with extraversion and happiness (life satisfaction) while the correlation with neuroticism was negative. Similarly, Hausmann et al. (2013) found that cultural positivity and life satisfaction (happiness) positively predicted OCA, even after controlling for job satisfaction and job role (blue-collar, white-collar, or management) at the individual level. Since the disproportionately larger size of the German and the Czech subsamples may have distorted the results, Hausmann and colleagues repeated their analysis with randomly reduced subsamples. The results showed the same pattern of correlations and statistical significance. It was therefore concluded that affective commitment ratings not only reflect employees' attachment levels but also cross-cultural differences in constructs reflecting affectivity.

To provide a more specific picture of the discussed cross-country relationships within Europe, we re-analyzed the data reported in the aforementioned studies using European countries only.

We correlated the culture, economic and personality variables used in the Hausmann et al. (2013) study with the commitment scores for the same European countries reported in the other studies (N = 9 - 14). The results are both convergent and divergent. For individualism, rank correlations with commitment scores were consistently negative, ranging from $r_s = -.14$ (Koster, 2011) to $r_s = -.55$ (Meyer et al., 2012). Collectivism and commitment thus seem to be positively associated within Europe. Furthermore, in support of the findings of Hausmann et al. (2013) and Gelade et al. (2006), coefficients for positivity with commitment scores were mostly positive, ranging from $r_s = .13$ (Meyer et al., 2012) to $r_s = .38$ (Six & Felfe, 2006). Only Fisher and Mansell's (2009) meta-analysis revealed an inverse rank correlation for positivity and life satisfaction. An examination of the rank coefficients for HDI (as an indicator of economic welfare) reveals mixed rank correlations. They were positive in four studies (i.e. Gelade et al., 2006: $r_s = .27$; Koster, 2011: $r_s = .11$; Hattrup et al., 2008: $r_s = .35$; and Six & Felfe, 2006: $r_s = .36$), but negative in two studies (Fischer & Mansell, 2009: $r_s = -.37$; Meyer et al., 2012: $r_s = -.14$). Overall, these findings indicate a positive relationship between collectivism and commitment and a predominantly positive relationship with positivity across European countries. The relationship with the HDI is tentatively positive but less consistent.

3.2.2 Individual level

As Meyer et al. (2012) noted, the correlations of commitment with individualism, collectivism, and power distance at the country level are very similar to those reported at the individual level (e.g., Clugston et al., 2000; Felfe et al., 2006; Felfe, Yan, et al., 2008; Wasti, 2003). There are some individual-level studies with European samples that have analyzed the relationships between a person's cultural orientation and commitment. For example, Felfe, Yan, et al. (2008) found that collectivism was positively associated with OCA, OCC and OCN in Germany and in Romania. Additional hierarchical regression analyses revealed that collectivism made a unique contribution to the explanation of commitment in both countries, even after controlling for demographics and other variables (remuneration, task content, climate, and leadership). There is thus evidence that collectivism is an independent predictor of commitment not only at the country level but also at the individual level of analysis. Another study with German employees revealed that power distance is also related to

commitment, albeit only to OCC (Felfe et al., 2006). More recently, Felfe and colleagues (in prep.) examined commitment in Austria, Germany, Slovenia and Spain, and found that all three commitment forms were positively related with collectivism, while power distance is negatively related to OCA and positively related to OCN. Although the correlations were different between countries, these differences were only small (e.g. the correlation between collectivism and OCA was smaller in Slovenia and higher in Spain, and the correlation between power distance and OCN was stronger in Austria and in Slovenia but not significant in Germany). Glazer et al. (2004) reported somewhat similar findings. They found positive relationships between OCA and values that are characteristic of collectivistic countries (conservation and self-transcendence; see Schwartz, 1992), and negative relationships between OCA and values that are characteristic of individualistic countries (openness to change and self-enhancement, Schwartz, 1992).

Overall, when considering European countries at the individual level of analysis, there is evidence for a positive relationship between collectivism and all three commitment forms (OCA, OCC and OCN). Power distance also seems to be positively associated with OCN and OCC, but negatively with OCA.

3.2.3 Cross level

So far, the relationships between values and commitment have been considered separately at the group level (i.e. between countries) and at the individual level (i.e. within countries). However the nature and strength of the individual-level relationships might vary from one country to another depending on aggregate country-level characteristics (e.g., national culture). That is, there may be different individual-level associations between commitment and value orientations (→ 3.2.3.1); commitment and antecedents (→ 3.2.3.2); and commitment and consequences (→ 3.2.3.3) based on culture. We will examine each of these possibilities in turn by reviewing existing studies with European samples.

3.2.3.1 Value orientations and commitment

The culture-fit hypothesis posits that individuals with a higher collectivistic value orientation are better adjusted in a collectivistic context and - vice versa - that individuals with a higher individualistic value orientation are better adjusted in an individualistic context (Ward &

Chang, 1997). For example, in a collectivistic context, individualistic employees are less likely to receive positive feedback and support on their behavior, and even experience more conflict than their collectivistic counterparts. Collectivistic employees, on the other hand, are more willing to engage in closer relationships with their organization and develop higher commitment, and this tendency might be reinforced when the cultural context positively responds to group-oriented behavior and the effort to fulfill duties and obligations. Consequently, the emotional attachment of individuals is likely to increase when high value congruence is experienced. Similarly, Felfe, Yan, et al. (2008) have argued that collectivists and individualists prefer different behaviors and strategies which are more or less compatible with the norms and expectations of the context. During conflicts, for example, individualistic individuals communicate more directly and seek clarification, whereas collectivistic individuals are primarily concerned with maintaining relationships and are therefore willing to make compromises or submit to authority in order to solve or avoid the conflicts. In support of the culture-fit hypothesis, Felfe, Yan, et al. (2008) could show that the relationship between collectivism and commitment at the individual level is stronger in Romania (more collectivistic) than in Germany (more individualistic), indicating some cross-level effects in Europe.

3.2.3.2 Antecedents and commitment

We now turn to the question of whether cultural differences affect the relationships between antecedents and commitment. On the individual level, Wasti (2003) could show for Turkish samples that the commitment of collectivistic employees was primarily predicted by satisfaction with the leader, while the commitment of individualistic employees was determined by satisfaction with work and promotion. Similarly, Felfe, Yan, et al. (2008) found that in Germany and in Romania, transformational leadership was more closely associated with OCA for collectivistic than for individualistic employees. The greater impact of leadership on collectivistic employees should be even stronger in collectivistic societies where leaders generally play a more crucial role (Z. X. Chen & Francesco, 2000; Cheng, Jiang, & Riley, 2003). In fact, Felfe, Yan, et al. (2008) found a stronger relationship between leadership and all commitment forms in China. However, no significant differences were observed between Germany (more individualistic) and Romania (more collectivistic). Partly

confirming these results, Jackson, Meyer, and Wang (2013) reported in their international analysis (including European countries) that the relationship between transformational leadership and commitment in collectivistic countries was higher for OCC and OCN but not for OCA.

As for task content (intrinsic task motivation), Felfe, Yan, et al. (2008) found that the relationship between an intrinsically satisfying job task and OCA was stronger in Germany than in Romania (and even lower in China). This finding lends further support to the notion that a group or interaction-related variable (e.g., leadership) is more important in a collectivistic context while job conditions that fulfill individual growth and enhancement are more relevant in individualistic contexts.

3.2.3.3 Consequences and commitment

Generally there is strong evidence for meaningful relationships between commitment and work-relevant outcomes from worldwide meta-analytic studies (e.g., Cooper-Hakim & Viswesvaran, 2005; Lee, Carswell, & Allen, 2000; Meyer et al., 2002). In their recent study, Meyer et al. (2014) analyzed outcomes of OCA and reported negative correlations with withdrawal cognitions ($\rho = -.57$) and turnover intentions ($\rho = -.15$), and positive correlations with performance ($\rho = .25$) and OCB ($\rho = .35$). Felfe and Franke (2012) revealed similar relationships for Germany. Moreover, these authors report that the relationship between OCA and perceived strain is negative ($r = -.24$), whereas the relationship between strain and OCC is positive ($r = .08$). This pattern is also similar to the findings of Meyer et al. (2012) and Meyer and Maltin (2010). In addition to direct effects, German studies show that OCA serves as a buffer for the stress and strain relationship suggesting that highly committed employees are less vulnerable to the adverse effects of high stress (Schmidt, 2007; Schmidt & Diestel, 2012).

In the following section, we turn to the question of whether cultural differences influence the relationships between commitment and consequences. In their most recent meta-analysis, Meyer et al. (2014) examined if the relationships between OCA and withdrawal cognition, turnover, and organizational citizenship behavior were moderated by culture. They calculated the correlation between the mean correlation for a nation (OCA and outcome) and national culture values scores. The correlations between OCA and withdrawal cognition among 47

countries were correlated with individualism ($\rho = .43$), indicating that the negative relationship between OCA and withdrawal cognition ($\rho = -.57$) was lower in individualistic countries and stronger in collectivistic countries. The correlations for OCA and organizational citizenship behavior among the 47 countries were also correlated with individualism ($\rho = -.34$), indicating that the positive relationship ($\rho = .35$) was lower in individualistic countries than in collectivistic countries. However, there were not enough European countries for systematic comparisons within Europe. Fischer and Mansell (2009) found in their meta-analysis that the relationships between OCA and turnover intentions were somewhat stronger in individualistic countries, whereas the OCN – turnover relationships were stronger in collectivistic countries. They state that overall, absolute cross-cultural differences in all analyses were relatively small compared with differences due to study and industry effects. There are only a few studies that exclusively focused on Europe. While Vandenberghe et al. (2001) found that relationships between commitment components and intent to quit were culturally invariant, Felfe, Yan, et al. (2008) could show that OCA was a stronger predictor for OCB and turnover intention in Romania than in Germany after controlling for other relevant variables (e.g., task content, remuneration, leadership). In their current study with four European countries, Felfe et al. (in prep.) also found a stronger relationship between OCA and organizational citizenship behavior in Spain (more collectivistic) than in Germany and Austria. Overall, with regard to the consequences, it can be concluded that collectivism seems to strengthen the meaning of OCA for outcomes.

3.3 Current Research Issues

Besides the examination of organizational commitment levels, antecedences and consequences, European studies have addressed other specific research issues. Three of them shall be outlined briefly. The first concerns commitment among the increasing number of contingent workers in the European labor force (\rightarrow 3.3.1). The second looks at expatriate managers' commitment to their parent organization and the local subsidiary (\rightarrow 3.3.2). The third study examines the relationship between commitment and conflict in organizations and gives an example of how commitment to different foci (organization and team) can interact to influence conflict handling (\rightarrow 3.3.3). The three studies underline the importance of conceptualizing commitment as a multi-faceted phenomenon with different targets

(organization, team, form of employment) and forms (affective, calculative, normative), rather than looking at individual components separately.

3.3.1 Form of employment: Contingent workers

Given the growing number of contingent workers in Europe's workforce, there is increasing interest in research that deepens the understanding of the commitment of this specific employment form. For example, Felfe, Schmook, Six, and Wieland (2005) examined the relationships between commitment, transformational leadership, organizational citizenship behavior, and strain among contingent workers in Germany. Considering the dual commitment of temporary workers to the agency and the hiring client company to which they were assigned, a distinction was made between these two commitments. The results revealed that characteristics of the agency (salary, leadership) are related to the commitment to the agency, whereas conditions within the client organization (task content, leadership at the client) are more related to the commitment to the client organization. Commitment to the client company is also a stronger predictor for organizational citizenship behavior and for perceived strain than commitment to the agency. Furthermore, similar to the findings of Liden, Wayne, Kraimer, and Sparrowe (2003) who conducted a study with US contingent workers, commitment to the client was found to be stronger than the commitment to the agency. Another German study confirmed this differential effect (Galais & Moser, 2009): commitment towards the client organization had positive effects on workers' well-being while agency commitment had no effects.

3.3.2 Dual commitment in international assignments

As contingent workers experience multiple commitments to different organizations, employees in larger organizations may develop multiple commitments to different entities within the organization, such as the team and the organization in which the team is nested. Moderate correlations between team and organizational commitment suggest that individuals are capable of maintaining meaningfully distinct levels of commitment to both entities (Franke & Felfe, 2008). In a specific application of this insight, Nguyen et al. (2015) examined how the interplay of local operation and parent company commitment affects expatriate managers' intention to stay on international assignments. Given the prevalence and

costs of premature returns, the study was of great practical interest. Furthermore, it had theoretical relevance as one of the first studies to investigate interactive effects of multiple commitments to different targets. The findings suggested that commitment to the parent company, especially in its calculative form, is stronger predictor of expatriate retention than commitment to the local operation. However, the effects of the local operation commitment on retention became more important when the parent company commitment were weaker. In other words, local operation commitment can compensate for low levels of parent company commitment when it comes to retention.

3.3.3 Commitment and conflict dynamics

Apart from the more specific case of international assignments, the pattern of dual commitment to the team and to the overall organization may also shape employees' reaction to interteam conflicts in the organization: How will the conflict be managed if employees feel highly committed to their team but only poorly committed to the overall organization and vice versa? Will a sense of dual commitment contribute to organizationally beneficial conflict outcomes? Given today's trend in organizations toward adopting more decentralized and team-based structures, researchers have argued that organizations should apply their limited resources mainly to the development of workgroup or team commitment because these subunits are more proximate to, and thus have stronger consequences for, the employee's experience and performance at work than the overall organization (Foote & Tang, 2008; Lu et al., 2013; S. Park et al., 2005; Pearce & Herbig, 2004). The question arises, however, if a strong subunit commitment is always positive. So far, no attempt has been made to explore the potential risks that emanate from specific patterns of multiple commitments when organizational subunits are in conflict with one another. It is conceivable that the otherwise beneficial effects of strong subunit commitment turn negative for the organization when such conflicts occur. Furthermore, it is unclear how subunit and overall organizational commitment combine to affect employees' conflict management behavior. Previous research has treated multiple commitments mostly as separate entities with independent effects on organizationally relevant outcomes (Klein, Becker, & Meyer, 2009). Accordingly, Johnson, Groff, and Taing (2009) requested for more research on multiple commitment patterns whose behavioral consequences may reside in the pattern itself rather than just in the sum of its parts.

Following this request Wombacher and Felfe (2014) examined with a German military sample how conflicts between organizational subunits (e.g. teams, departments) are managed based on employees' commitment to both their subunit and the overall organization. Findings from an experimental study where participants were asked to indicate the extent to which they agree with different conflict handling option (i.e., Dominating, Integrating) in reality-based conflict scenarios indicate that a strong subunit commitment leads to organizationally disruptive conflict handling unless buffered and balanced by a strong organizational commitment. These findings bring some balance to the view, largely nurtured by existing research, that team commitment invariably benefits the organization. To ensure collaboration both within and across teams, organizations must strive to foster a sense of dual (organizational and team) commitment among their workforce.

3.4 Summary and Discussion

To face the demographic challenges of today, European businesses must show that they care about their employees and build commitment. To contribute to a better understanding of the phenomenon, we have tried to give an overview of what is currently known about commitment in Europe and how it may be affected by culture, economy and personality. Despite the methodological challenges underlying cross-country comparisons, there is converging evidence for stronger emotional attachments in countries whose populations are more collectivistic, wealthy, and satisfied in life. Moreover, many relationships between commitment and its antecedents and outcomes seem to be enhanced where an individual's value orientation fits that of the surrounding context.

These observations notwithstanding, it must be kept in mind that there is considerable variation of commitment within countries, and caution must be exercised when drawing inferences from the country-level to individual organizations or workers. Moreover, commitment is a complex phenomenon. While much is known about affective commitment, the other two forms (normative, continuance) are less well researched. Commitment may be directed not only at the organization, but also at other foci (especially teams and workgroups). As research that incorporates this complexity is sparse, we had to focus our review mostly on affective commitment toward the organization. As will be shown in chapter 4, however, complex interactions of different forms and foci of commitment can lead to unique and

sometimes perhaps unexpected findings. When considering contingent workers, a meaningful distinction is in order between commitment to the hiring agency and to the client company. Furthermore, despite the apparent drag in today's organizations toward more team-based structures, maintaining a sense of dual commitment may still be worthwhile as it can enhance conflict management and performance in an organization. We want to encourage researchers to more fully incorporate this complexity in their research designs. Moreover, there is a need for more longitudinal analyses that can trace changes in commitment over time. Only then can we draw a more reliable picture of the situation of commitment in Europe or elsewhere. Representative survey data such as from the Eurobarometer or International Social Survey is available for this purpose and can be used as proxies for Meyer and Allen's (1990) three-component measure if collecting primary data with original measures is too time-consuming or expensive.

4 Effects of the Interplay of Team and Organizational Commitment on Interteam Conflict Management

Today's organizations increasingly rely on teams and team-based structures for innovation and performance (Lawler, Mohrman, & Ledford, 1995; Mathieu, Maynard, Rapp, & Gilson, 2008). However, conflicts between teams routinely arise because teams differ in their needs, aims, and orientations. For example, project teams often face scheduling conflicts such as when one team's aim to introduce a new software conflicts with another team's need to use the existing software for on-time project completion. Similarly, R&D teams' focus on developing new and innovative products often collides with marketing teams' focus on products for which customer demand exists or can be generated. Given that such conflicts are hard (if at all) to avoid (De Dreu & Gelfand, 2008; Lawrence & Lorsch, 1967), research in the field of organizational conflict suggests that one critical key to understanding organizational performance lies in understanding what motivates employees to choose specific conflict management strategies in response to conflict (DeChurch, Mesmer-Magnus, & Doty, 2013; Tjosvold, Wong, & Feng Chen, 2014). In this study, we propose that employee commitment, or more precisely, the interplay between employees' team and their higher-order organizational commitment, has a major role to play in determining employees' conflict handling motivation (Meyer & Allen, 1991; Meyer & Herscovitch, 2001). Our aim is to systematically analyze and compare different team and organizational commitment patterns in terms of their impact on employees' preferences for four distinct interteam conflict management strategies (i.e. Dominating, Integrating, Obliging, Avoiding). Our main proposition is that if one commitment is high and the other is low, employees' preferences will tend towards suboptimal or even dysfunctional conflict handling strategies with negative consequences for the organization. By contrast, if both commitments are high ("dual commitment"), strategies beneficial to the organization are likely to result.

Investigating this issue helps clarify alternative views in the literature as to the respective role of team and organizational commitment in the context of organizationally nested interteam conflict. According to the common ingroup identity model (Gaertner, Mann, Murrell, & Dovidio, 1989), strong team commitments pose a threat to cooperative interteam relations because they attract attention to interteam differences and goal incompatibilities ("us" versus

"them"). Recategorization in terms of the overarching organizational identity ("we") is advocated as a means to minimize the differences and restore interteam harmony and collaboration. A strong organizational commitment is thus considered beneficial while a strong team commitment is considered a risk. The mutual intergroup differentiation model (Hewstone & Brown, 1986), on the other hand, argues that recategorization will be met with resistance among highly committed team members, and interteam relations will only be evaluated favorably if team and organizational identity are simultaneously salient ("we are different but sitting in the same boat"). As per this perspective, dual commitment will make the strongest contribution to cooperative interteam relations. Finally, the ingroup projection model (Mummendey & Wenzel, 1999; Wenzel, Mummendey, & Waldzus, 2007) predicts that when subgroups are fully nested (as teams within the organization), dually committed team members may see their own team as relatively more prototypical for the organization ("we are different and more important for the organization"), and thus tend to be more rather than less dominating in their conflict handling approach.

Each of the aforementioned perspectives has been tested with empirical success, albeit not in the context of nested interteam conflict. As will be shown, this type of conflict presents a special social dilemma-type character with consequences not only for the conflicting teams but also for the overall organization as a third party. This character needs to be integrated when assessing the applicability of the different models in organizational settings. Furthermore, the common ingroup identity model unequivocally states the value of organizational commitment for interteam relations regardless of the strength of one's team commitment (i.e. organizational commitment can make interteam relations more functional *despite* a strong team commitment). An interesting question thus is whether a strong organizational commitment may also trigger organizationally dysfunctional conflict responses, namely when - at the same time - team members do not feel committed to their team. By systematically comparing different team and organizational commitment constellations, our study will be able to address this open question.

In the following, we will outline the social dilemma-type character of nested interteam conflict and present the strategies in which such conflict can be managed. We will then turn to the role of employee commitment in motivating strategy preferences and develop our

hypotheses. Two studies - an experiment and a survey - have been conducted to allow rigorous hypotheses testing. Results will be presented, and the broader theoretical and practical implications of our research will be discussed.

4.1 The nature of interteam conflict in the organization

Interteam conflict can be generally defined as incompatible goals or interests between two organizationally nested teams where the action of one team interferes, obstructs or in some way gets in the way of the actions of the other (e.g. competition over scarce resources, disagreement on how to perform a task, etc.) (Tjosvold et al., 2014). We use the term "team" in this definition to denote any organizational subgroup that is part of the formal structure of the organization, including workgroups, departments, project teams or local operations.¹ In his analysis of interteam relations, Kramer (1991) shows that interteam conflict typically presents a *mixed motive* or *social dilemma structure* where solely serving team interests comes at the expense of the overall organization, and thus ultimately at the expense of all teams constituting the organization. The reason for this trade-off lies in the need to integrate the often divergent team interests for the achievement of organizational goals. Overall performance will suffer, for instance, if production teams' concern for long economic runs is not properly coordinated with sales teams' preference for short-term and flexible responses to changing customer needs. Even when task interdependence is low, social dilemma situations frequently arise from the teams' competition over scarce resources. Such situations are often approached with a fixed-pie assumption, and teams consume resources in excess of actual needs to ensure future allocations (Fisher, 2000). The possible result is a frustration of each other's goal-directed behavior and a serious depletion of organizational resources to the

¹ We acknowledge that "team" is sometimes used in a more narrow sense to denote organizational subgroups involving a high degree of task interdependence among its members. Nevertheless, we use the term as an umbrella term to ensure connection to the commitment literature which typically refers to subgroup commitments either as "team commitment" or "workgroup commitment". "Team" seemed to be more suitable than "workgroup" given our focus on interteam conflict as a situation where the goals of different subgroups collide, and on the role of one's commitment to one's subgroup and its shared goals. Workgroups do not necessarily involve shared goals. However, they may also be in conflict with other groups (e.g. competition over scarce resources such as office space) and have thus also been included in the scope of our definition.

detriment of all teams. Based on these considerations, van Knippenberg (2003) has argued that interteam conflict should not be considered simply in terms of conflicting team interests, but "in terms of the weight assigned to team versus organizational interests, and in terms of the willingness of team members to cooperate to serve organizational goals" (p. 393). Nested interteam conflict thus differs from "classic" intergroup conflict (Sherif, 1958) in terms of the number of parties involved and the nature of the parties' goal interdependence. Intergroup conflict typically involves two groups that can realize their goals either at each other's expense (negative interdependence) or if the other group also attains its goals (positive interdependence). By contrast, nested interteam conflict involves an additional third party (i.e. the overarching organization) whose goals can only be achieved through cooperation. However, the existence of the overarching goals does not a priori override or eliminate the opposing team goals. The management of interteam conflict is thus not merely a question of cooperation or competition, as van Knippenberg (2003) has pointed out. This aspect needs to be taken into account when considering the strategies in which interteam conflicts can be managed.

4.2 The role of interteam conflict handling strategies

The organizational conflict literature suggests that interteam conflict is inevitable but not necessarily dysfunctional for organizations (Rahim, 2011). There is growing evidence that the manner in which employees choose to handle conflict is an important predictor of the conflict-performance relationship, regardless of the source or the intensity of the perceived incompatibilities. For example, there is direct evidence that the adoption of an integrating conflict strategy contributes to rendering task and relationship conflict constructive (Jiang, Zhang, & Tjosvold, 2013; Tekleab, Quigley, & Tesluk, 2009). Furthermore, meta-analytic findings indicate that conflict strategies may account for up to four times more variance in team performance than the nature of the conflict states (i.e. task, process or relationship conflict) (DeChurch et al., 2013).

Our conceptualization of interteam conflict strategies is derived from the Dual Concerns Model which expands upon earlier conflict management frameworks (i.e. Blake and Mouton's (1964) Conflict Management Grid, Kilmann and Thomas's (1977) Conflict Management-of-Differences (MODE), and Rahim's (1983) framework for handling interpersonal conflict).

The basic assumption is that conflict handling is motivated by the relative strength of concern for one's own party (here: one's team) and the relative strength of concern for the other party (here: the other team). Combinations of these two dimensions result in four distinct conflict management strategies: (1) *Dominating*, i.e. imposing one's will on the other party; (2) *Integrating*, i.e. seeking a solution that will satisfy both parties' needs; (3) *Obliging*, i.e. fulfilling the other party's needs at the expense of one's own; and (4) *Avoiding*, i.e. downplaying the importance of the conflict and evading its resolution.²

There is continued debate over which strategy is the most functional and thus desirable from the organization's point of view. The contingency perspective considers the appropriacy of a particular conflict strategy as a function of situation, and thus no one "best" approach should be prescribed (De Dreu & Gelfand, 2008; Rahim, 2011). However, considering the social dilemma character of interteam conflict described in the previous section, we argue that organizational interests are best served if team members prefer to solve interteam conflict via *Integrating*. The mutual dependence on tasks, information, and resources requires teams to coordinate their efforts and accommodate not only their but also the other team's needs if organizational goals are to be attained. If members adopt a win-lose orientation (i.e. *Dominating*), give too much weight to the needs of the other team (i.e. *Obliging*), or let the conflict grow and fester by staying passive (i.e. *Avoiding*), overall performance is bound to suffer. In support of this view, a recent review of the organizational conflict management literature indicates that *Integrating* is most strongly associated with organizational performance (Tjosvold et al., 2014; Van De Vliert, Nauta, Giebels, & Janssen, 1999).

With its differentiation into four conflict management strategies, the dual concerns model accommodates the nature of nested interteam conflict better than the dichotomy of confrontation versus collaboration. It is important to reiterate, however, that our focus is on employees' *preference* for a specific conflict strategy based on their team and organizational commitment patterns. When it comes to subsequent strategy implementation, individuals

² Occasionally, a fifth strategy called "Compromising" is postulated which indicates a moderate concern for one's own and the other party (e.g. Rahim, 1983). As Pruitt (1983) has pointed out, however, this option may be viewed as a half-hearted form of problem solving and thus has no additional explanatory power beyond the other four strategies. We therefore omit this approach from our analysis.

often combine and mix different behaviors (Munduate, Ganaza, Peiró, & Euwema, 1999). For example, they may start with dominating to underline the importance of the issue and dissuade the other party from taking advantage. They may then turn to integrating to signal their willingness to solve the conflict through problem-solving (Putnam, 1990). Conflict behavior thus often involves the use of different tactics but may still be in line with the overall strategy or preference. This does not mean that preferences cannot also change in the course of a conflict. However, if team members with the same commitment pattern turn out to have similar conflict handling preferences, the implementation of a specific strategy should be facilitated because there is consensus on how to proceed. Leadership that is in line with team members' preferences will receive more support whereas leaders will have to face resistance in the opposite case. Preferences are thus an important study focus in their own right.

4.3 Relating team and organizational commitment to conflict handling strategies

Since the effects of interteam conflict will depend more on how the conflict is managed than on the reasons for its emergence, calls have been made for more research on the motivational mechanisms that lead to the adoption of specific conflict handling strategies (DeChurch et al., 2013). In particular, Integrating is hard work that requires effort and commitment on behalf of the individuals involved. Employee commitment should thus play a central role in shaping employees' conflict responses (London & Howat, 1978).

To reiterate, we define commitment as an employee's emotional attachment to, identification with, and involvement in a target (Meyer & Allen, 1991). The targets of interest are the team and the overall organization because these are the entities involved in interteam conflict and affected by its outcomes. Studies suggest that employees may feel differentially attached to the two targets, especially when the organization is large and complex (Becker & Billings, 1993; Levine & Moreland, 2006; Reichers, 1986; van Dick, van Knippenberg, Kerschreiter, Hertel, & Wieseke, 2008).

It is important to note that while our definition of commitment includes identification as an important element, a distinction is often made between the identification and the affective commitment construct. Whereas identification is defined as an individual's perception of

oneness with a group driven by affiliation, self-enhancement and uncertainty reduction needs (Ashforth & Mael, 1989; Tajfel, 1982; Tajfel & Turner, 1986), commitment is conceived of as an affective force that binds individuals to favorable actions toward the group in line with the group's values and goals. In their integrative process model, Meyer, Becker, and van Dick (2006) have argued that self-defining as a group member is a necessary but not sufficient precursor to developing a motivation to act on the group's behalf such as commitment. In support of this view, a recently published series of longitudinal analyses found that organization-directed identification and affective commitment are part of a causal chain where common antecedents (e.g. perceived organizational support) predicted organizational identification, which in turn influenced affective commitment as the more proximal determinant of common outcomes (e.g. turnover) (Stinglhamber et al., 2015). Given that conflict management strategies constitute courses of action of relevance to one's team and to the organization, commitment may be seen as the more proximal determinant of our outcome variables and has thus been chosen as our focal study concept. In particular, the “motivation to act”-aspect of commitment will be important for developing our hypothesis for Avoiding. Nevertheless, we acknowledge the process perspective and integrate the insights from the identification literature (i.e. categorization and social identity theory) into the development of our hypotheses.

With the advent of flatter and more team-based organizational structures, commitment scholars have increasingly argued that the promotion of team commitment (TC) may be more viable than the promotion of organizational commitment (OC), because TC is more closely associated with team-oriented behavior, and thus more effective at fostering team performance (Galletta et al., 2014; Ganesh & Gupta, 2015; Klein et al., 2012; Lu et al., 2013). With regard to conflict, research has shown that the strategies used to respond to conflict *within* teams tend to be more cooperative (i.e. Integrating) and less confrontational (i.e. Dominating) when team members experience high levels of positive affect such as a strong TC (Desivilya & Yagil, 2005; Yang & Mossholder, 2004). Employees who are thus accustomed to resolving *intra*team conflict collaboratively might be expected to use the same strategy to resolve conflict wherever it occurs in the organization, including *inter*team conflict.

However, a strong TC also means that team members are affectively bound to their teams' values and goals. When these are threatened or obstructed by another team (as is by definition the case in interteam conflict), it is likely that TC fosters a dominating conflict approach. Furthermore, self-categorization and social identity theory (Tajfel, 1970, 1982) suggest that individuals who feel strongly committed to an ingroup such as their team define themselves in group terms and, driven by a desire to feel good about their team and thus themselves (self-enhancement motive), engage in interteam comparison processes by which they seek to confirm or establish ingroup-favoring evaluative distinctiveness. Underlying categorization processes lead individuals to accentuate interteam differences, and this accentuation may result in heightened interteam bias even when there are no objective conflict triggers (for reviews, see Brewer, 1979; Tajfel, 1982).

One of the most prominent solutions to reducing intergroup bias has been proposed within the common ingroup identity model and involves *recategorizing* members in terms of a single superordinate identity (Gaertner & Dovidio, 2000; Gaertner et al., 1989). The basic idea is that transforming members' representations of separate groups (i.e. different teams - "us" versus "them") into one inclusive group (i.e. the overarching organization - "we") will reduce intergroup bias by leaving a homogeneous core in which relationships will be perceived as purely intragroup in kind. The positive feelings that are generated by a single-identity experience toward ingroup members should thus be extended - toward former outgroup members (i.e. members of the other team). Although the common ingroup identity model recognizes that team boundaries may not be totally eclipsed, the general view is that OC is beneficial for interteam relations while TC presents a potential risk.

By contrast, the mutual intergroup differentiation model (Hewstone & Brown, 1986) argues that recategorization is difficult if not impossible to achieve among individuals who are highly committed toward naturally occurring groups such as teams. Attempts at eliminating interteam boundaries may be perceived as a threat to individuals' team-based distinctiveness and thus trigger even more bias toward the other team (reactance). Individuals' TC should thus not be played down but positively reaffirmed. The *simultaneous* activation of OC and TC in terms of a strong dual commitment is considered beneficial because it allows members to preserve their team-based distinctiveness while conceiving of themselves as having enough in

common with members of the other team (Fiol, Pratt, & O'Connor, 2009). Complementing this argument, optimal distinctiveness theory (Brewer, 1991) posits that individuals have a fundamental desire for assimilation and differentiation, for "being the same and different at the same time" (p. 475). These needs are reflected in, and nurtured by, employees' organizational and team commitment in that the former facilitates feelings of belongingness to a larger and more powerful collective, while the latter facilitates feelings of uniqueness and exclusiveness within that collective.³ Since a dual commitment resonates well with optimal distinctiveness needs, it should increase employees' motivation and involvement at work, and thus also their willingness to implement an integrating conflict strategy which usually requires hard work.

The opposite effect of dual commitment is predicted by ingroup projection theorists (Mummendey & Wenzel, 1999; Wenzel et al., 2007) who argue that intergroup bias may occur precisely because a superordinate identity is salient. The basic assumption, derived from self-categorization theory, is that team members derive their own and the other team's relative value from the higher-order organization in which both teams are nested. The organizational identity is thereby viewed not as static or objective but as "subject to the social perception from diverging vantage points of ingroup and outgroup perceivers" (Wenzel et al., 2007, p. 334). For example, sales teams may consider their goal of serving customers as relatively more important for the organization than production teams' goal to standardize products and minimize costs. In this sense, a strong dual commitment may exacerbate interteam conflict because it involves two teams in disagreement over their relative

³ Conceptually, this idea is akin to Wiesenfeld's (1996) distinction between a macro- and micro-levels of community belonging. Macrobelonging, so Wiesenfeld, is the feeling shared by all members that – "beyond the polarizations and discrepancies which arise within [the community –] (...) integrates minorities to that portion of the community which all those who have been through a process identify with and defend" (pp. 341-342). It coexists with a number of microbelongings that occur among the "multiple collective identities" which are "redemptive of diversity and privacy" (p. 342). In this sense, the organization provides the inclusive and shared frame of reference on which important and exclusive team identities can develop and strive.

prototypicality and implied value difference.⁴ A strong TC will motivate team members to give their own team more positive value and further its cause. A strong OC is needed for the organization to become self-relevant and serve as a basis for intergroup comparisons. Although objective conflict triggers (e.g. scarce resources) are not needed for such disagreements to occur, they are likely to reinforce the underlying categorization processes and increase bias (Ashforth & Mael, 1989). The theory recognizes, however, that dual commitment does not always or inevitably lead to biased intergroup relations. To differentiate the model from the mutual intergroup differentiation model (which suggests positive effects), Wenzel et al. (2007) have argued that negative effects of dual commitment are more likely when the superordinate category is truly inclusive of the two subgroups. Here, the superordinate category "is more likely to be a relevant comparison background for the two groups, which each of the two groups might want to capture for their own interest."⁵ Consequently, dually committed employees should have a pronounced tendency to adopt a confrontational conflict handling strategy since both teams are, by definition, fully embedded in the organization.

To summarize, views regarding the effects of TC and OC in interteam conflict situations differ. While the common ingroup identity model considers TC as a driver of problematic interteam relations and OC as a remedy (recategorization), the ingroup projection model indicates that OC might also be problematic due to disagreements over the teams' relative value and status. By contrast, the mutual intergroup differentiation model expects a strong

⁴ "Ingroup projection" does not mean that team members equate their own team's identity with that of the organization in terms of an absolute prototypicality. Rather, ingroup projection means "the perception, or claim, of the ingroup's greater *relative* [italics added] prototypicality for the superordinate group" (Wenzel et al., 2007, p. 337). Hence even when both sides agree that one team is more prototypical than the other in an absolute sense, team members may tend to attribute a higher relative prototypicality to their own team than is attributed to them by the other team. It is this disagreement over the teams' relative prototypicality that is considered by ingroup projection theorists as inviting of intergroup bias.

⁵ Groups where the superordinate category is not truly inclusive are referred to as "cross-cutting" and include friendship cliques, common interest groups, demographic clusters, etc. These groups are external to the organization and overlap only partially with membership in the organization. The organizational identity can thus not be used as a shared framework to which all ingroup and outgroup members refer.

dual commitment to be conducive to collaborative interteam conflict handling. Interestingly, both the ingroup projection and the mutual intergroup differentiation model reject recategorization on the grounds that is unrealistic for individuals with a high commitment toward natural groups such as teams (i.e. members refuse to give up their cherished team identity). However, they remain unclear about how interteam conflict will be managed when, in fact, employees' TC is low and their OC is high. Such a commitment pattern also exists, for example among members of project teams whose limited life span may impede the development of a strong team commitment (Pelled & Adler, 1994; Thamhain, 2011); or among expatriates who are sent to work in a foreign operation but are unable to develop a sense of local attachment (Nguyen et al., 2015). While the common ingroup identity model expects consistently positive effects of OC for interteam conflict management regardless of the levels of one's TC (Dovidio, Gaertner, & Saguy, 2009), an interesting question is whether a low TC - high OC combination might also be dysfunctional for the organization in terms of how the conflicts are handled. Against this backdrop, we will now provide specific hypotheses for each conflict strategy based on the different commitment constellations. For a better overview, these hypotheses are summarized in Figure 3.

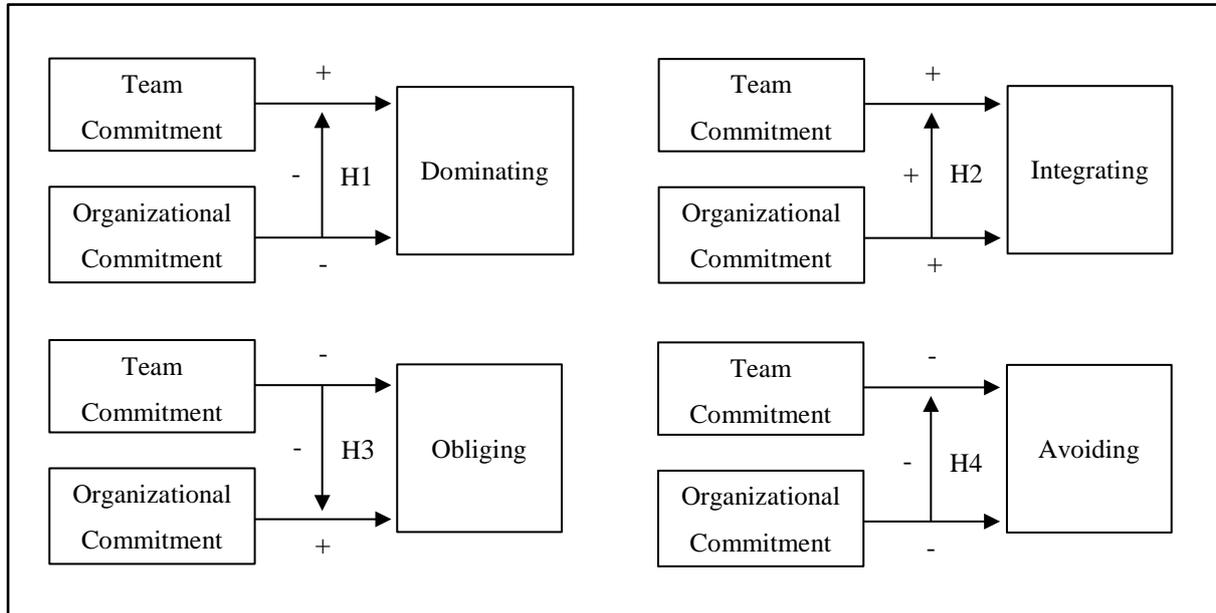


Figure 3: Overview of hypotheses

4.4 Hypotheses

4.4.1 Dominating (high concern for own team and low concern for other team)

Since interteam conflict means that the achievement of own team goals is jeopardized by the other team, employees' preference for Dominating should increase as their TC increases. Underlying categorization processes are likely to reinforce this effect. As the preceding discussion has shown, the moderating role of OC is less clear. Considering the mixed-motive character of interteam conflict, however, it seems unlikely that employees with a strong OC will be determined to pursue narrower team goals ahead of organizational goals at all costs. A strong OC should generate interest in overall performance (on which all teams depend) and thus raise the concern for both teams' needs. Without this higher-order bond, however, categorization theory predicts that employees' attention is directed away from the overall organization to the problematic ingroup-outgroup distinction the stronger their TC is. This should translate as a strong tug towards Dominating as the preferred strategy for handling interteam conflict. Adding to this argument, self-consistency theory posits that individuals strive to organize their thoughts, feelings and actions in a non-contradictory and balanced way (Festinger, 1962; Heider, 1958). Since Dominating means acting in line with team interests but not with organizational interests, its adoption will be perceived as self-conceptually consistent when TC is high and OC is low, but create self-conceptual tensions (and thus be less likely) when OC is high. We therefore suggest:

Hypothesis 1: The positive relationship between team commitment and Dominating is moderated by organizational commitment such that it will be more positive when organizational commitment is low and less positive when organizational commitment is high. The highest levels of Dominating should thus result when team commitment is high and organizational commitment is low.

4.4.2 Integrating (high concern for both own and other team)

Since Integrating means that own team concerns must not be neglected, we would expect a positive effect of TC on Integrating. The effect of OC should also be positive because it indirectly raises the concerns for the other team through the existence of a superordinate goal and the requirement for mutual cooperation to achieve that goal given the interdependence structure of the overall organization in which both teams are nested. Furthermore, if the dual commitment model holds, the positive effects of TC and OC on Integrating will be more than just additive. As Ashforth and Johnson (2001) have pointed out, the complexity of many organizational issues requires employees to apply multiple perspectives to the organization's problems, and rich and circumspect action may result if employees' can think, feel and act in terms of both their team and their organizational identity. For example, a sales executive representing the sales team at a strategic retreat for top managers needs to think in terms of the organization as a whole as well as his or her team, and project teams often comprise individuals from different subgroups precisely because they are expected to bring their group's viewpoint to bear on the project team's goals. By the same token, TC and OC may be expected to augment each other in interteam conflict situations to generate synergistic conflict solutions. Finally, from a self-conceptual tensions perspective (Heider, 1958), Integrating is most in line with a high TC - high OC combination because it means that organizational goals will be met while own team goals are not neglected. We therefore hypothesize:

Hypothesis 2: The positive relationship between team commitment and Integrating is moderated by organizational commitment such that it will be more positive when organizational commitment is high and less positive when organizational commitment is low. The highest levels of Integrating should thus result if both team and organizational commitment are high.

4.4.3 Obliging (low concern for own team and high concern for other team)

In light of the mixed-motive character of interteam conflict, Obliging can be seen as dysfunctional for the organization as Dominating because both choices imply that one party wins and the other loses (Gross & Guerrero, 2000). Clearly, a strong TC should counteract tendencies to accommodate the other team's wishes at the expense of one's own team because

it raises concern for own team goals. OC, on the other hand, is expected to contribute to Obliging by generating interest in the achievement of higher-order goals for which collaboration and consideration of both teams' needs are required. However, if only OC is high and TC is low, employees may neither be fully aware of, nor take a great interest in, their own team's needs. Consequently, the adoption of Obliging will be perceived as self-conceptually consistent: since members cannot physically escape from their team (to which they do not feel committed), they may wish to create a psychological distance between themselves and their team by giving more consideration to the needs of the other team. This wish may be all the more pronounced, the more negative or indifferent a member's ingroup feelings as a consequence of a low TC are. Based on these considerations, we predict:

Hypothesis 3: The positive relationship between organizational commitment and Obliging is moderated by team commitment such that it is more positive if team commitment is low and less positive if team commitment is high. The highest levels of Obliging should thus result when team commitment is low and organizational commitment is high.

4.4.4 Avoiding (low concern for both own team and other team)

Since Avoiding is incompatible with both team and organizational interests, we assume that this strategy becomes less preferred the stronger employees' TC or OC is. Furthermore, given that commitment implies a motivation to act, we suggest that either TC or OC alone should be sufficient to make Avoiding an unlikely conflict strategy. Only in those cases where employees' levels on both commitments are low should Avoiding be preferred. As van Dick et al. (2008) have noted with respect to self-consistency, low commensurate levels of TC and OC are inconsistent with membership in the team and the organization itself. The awareness of being part of a group one does not feel attached to may itself invite self-conceptual inconsistency, and motivate employees to distance themselves from those group memberships (Brewer, Manzi, & Shaw, 1993). Lower commensurate levels may thus add to feelings of alienation and demotivation, which in turn will reduce employees' willingness to apply time and energy to a conflict they do not feel involved in. We thus predict:

Hypothesis 4: The negative relationship between team commitment and Avoiding will be more negative if organizational commitment is low and less negative when organizational commitment is high (compensatory effect). The highest levels of Avoiding should thus result when both team and organizational commitment are low.

4.5 Research Approach

To allow a rigorous testing of our hypotheses, we conducted two studies: a vignette experiment (study 1) and a field survey (study 2). The aim was to obtain both internally valid (experiment) and externally valid (survey) findings, and to establish construct validity by cross-validating the data from both studies.

In general, a vignette experiment involves a number of carefully crafted descriptions of hypothetical vignettes (here: interteam conflict situations) which are administered to respondents for judgement. Theoretically important vignette factors (here: TC and OC) are systematically varied so that the effect of these factors on respondents' evaluations (here: conflict handling strategies) can be determined (Atzmüller & Steiner, 2010; Rossi & Nock, 1982). By exposing respondents to a set of contextual factors that approximate real-life decision making situations, vignette experiments typically produce results with greater external validity than those of laboratory experiments. At the same time, internal validity is enhanced due to the systematic manipulation of the theoretical factors (Alexander & Becker, 1978; Kunz & Linder, 2011; Wallander, 2009). A vignette experiment was thus considered a suitable tool for the analysis of our causal hypotheses, while allowing us to confront participants with a variety of reality-based conflict situations that would have been difficult to simulate in a laboratory setting. However, to strengthen the external validity of our results, a subsequent survey was conducted with a total of 692 participants from a separate sample. The survey measured participants' actual commitment to their organization and their team, and allowed us to analyze the relationships with validated measures of conflict handling.

To maximize comparability, both studies were conducted within the same organizational context, namely the German Armed Forces. The military was considered an appropriate setting because it involved participants with highly standardized knowledge, training, and

skills, thus reducing the problem of noise arising from differences in respondents' backgrounds. Moreover, the setting allowed us to investigate the extent to which our hypotheses applied to extreme cases of interteam conflict (i.e. conflicts that provided little room for interpretation and engendered serious consequences). In the following, we will outline the two studies in terms of their materials, samples, analytical procedures and the results obtained.

4.6 Study 1: Vignette Experiment

4.6.1 Study 1 - Methods

Materials. A total of eight real-world interteam conflict scenarios were developed based on qualitative interviews with experienced military personnel. In line with our definition of interteam conflict, each scenario revolved around incompatible interests between two teams (e.g. two squads) that are nested within the same higher-level organization (e.g. a service branch or a multinational brigade). The incompatibilities revolved around the sources most frequently cited in the literature, namely: competition over scarce resources (e.g. holidays, personnel, safety equipment), distribution of workloads and risks (e.g. taking on a difficult task), or differences in norms and values (e.g. dress codes). The hypothetical teams varied in their task and goal interdependence from highly interdependent (e.g. functional teams) to lowly interdependent (e.g. project teams). Participants were asked to adopt the perspective of a member of one of the two teams and decide how their team should respond to the conflict at hand. The description was manipulated with regard to the strength of participants' TC and OC (high vs. low), resulting in $2 \times 2 = 4$ vignettes per scenario. Borrowing from a validated German commitment scale (Felfe & Franke, 2012a), a high TC condition was invoked by sentences such as "Your team feels like family to you" or "You are proud to be a member of this team". A low OC condition was reflected in sentences such as "So far, membership in this organization has been disappointing for you" or "This organization cares little about your needs".

All four conflict strategies were available in each scenario and had to be rated on a 5-point Likert scale (from 1 = totally disagree to 5 = totally agree). The phrasing of the strategies differed depending on the context of the conflict. For instance, in a scenario involving a joint

mine clearing operation, Dominating involved denying the request from another unit with little experience to take over its more heavily mined sector (“Your team should keep the originally assigned (lightly mined) sector and leave the clearing of the more heavily mined sector to the other team”). However, the consequences of the four strategies (Dominating, Integrating, Obliging or Avoiding) were consistent across the different scenarios and mirrored the tripartite social dilemma of serving the outcomes (i.e. maximizing the benefits / minimizing the risks) for (1) the own team; (2) the other team; (3) the overarching organization. In line with the mixed-motive character of interteam conflict, *Dominating* meant maximizing the outcome for one's own team, minimizing the outcome for the other team, and failure to meet organizational goals; *Integrating* meant working together such that the outcomes for the organization were maximized and the benefits or risks were equally distributed between the own and the other team; *Obliging* meant minimizing the outcomes for the own team, maximizing the outcomes for the other team, and failure to meet organizational goals; *Avoiding* meant indifference to and therefore unknown outcomes for the own and the other team, and failure to meet organizational goals. All outcomes were displayed as percentages in a payout matrix to ensure that they would be interpreted in the same way by all participants.⁶

Pretest. Prior to the main study, a pretest was conducted to assess the quality of the vignettes and the effectiveness of our experimental manipulations. While there are no standard criteria for judging the value of vignette content, the methodological literature suggests that vignettes must be perceived as realistic, plausible, and internally consistent, and provide enough contextual information for participants to understand the described situation (Jasso, 2006; Rossi & Nock, 1982; Seguin & Ambrosio, 2002; Wason, Polonsky, & Hyman, 2002). In addition, the manipulated factors should be obvious (Wason et al., 2002). To test for these criteria, we performed concurrent think-alouds (Ericsson & Simon, 1993) with 11 officers as experts. As a result, three scenarios underwent revision to eliminate problems of

⁶ We would like to reiterate the point that the interests based resolution followed by Integrating does not need to be the most effective solution in all situations. In particular, the need for a speedy decision as a result of tight deadlines may sometimes prevent team members to address the conflict and engage in attempts to meet both parties' concerns. Since these situational cues were not the focus of our research, however, we constructed the scenarios such that time issues were not relevant.

understanding and make the experimental manipulations more obvious. The scenarios were then administered to a subset of the final sample ($n = 46$) with a view towards evaluating a) the perceived realism of the scenarios, and b) whether the factor manipulations worked in the intended directions. This was achieved by asking participants to indicate on a 5-point Likert scale a) the extent to which they considered the scenarios realistic and b) the extent to which they felt committed to their hypothetical team and the organization at large (based on recall). Average realism ratings fell within an acceptable range from $M = 3.8$ ($SD = 1.2$) for the least realistic scenario to $M = 4.4$ ($SD = 0.8$) for the most realistic scenario (see Table A1 in Appendix A). In addition, the experimental manipulations satisfactorily discriminated between the two factor levels of both the TC and the OC factor. This was evidenced by a series of t-tests which were performed on respondents' recall ratings of their TC and OC for each scenario (see table B1 in Appendix B). Mean differences between the high and the low commitment conditions were statistically significant, in the intended direction, and moderate to strong in effect (as measured by eta squared). Finally, the observed means and standard deviations for respondents' judgments of the four conflict management options were high enough to suggest that each option was chosen by the participants, and not excluded from their consideration in advance (see Table C-1 in Appendix C). In the light of these findings, it was decided to use all pretest scenarios for the main study.

Design. The factors underlying the vignette experiment were TC and OC as explanatory factors with two levels each (high vs. low), and a scenario factor as a contextual factor with eight levels (as there were eight different conflict scenarios). Consequently, the full factorial combination of all three factors resulted in a vignette population of $2 \times 2 \times 8 = 32$ different vignettes. Since this complete set was too large to be administered to a single respondent, a confounded factorial design was adopted whereby the 32 vignettes were systematically partitioned into four distinct subsets of eight vignettes each. Each subset contained each conflict scenario only once in order to avoid boredom effects arising from repeated exposure of participants to the same scenario. Two scenarios within a subset shared the same TC/OC factor level combination ($2 \times$ high/high – $2 \times$ low/high – $2 \times$ high/low – $2 \times$ low/low). Furthermore, each scenario was available in each TC/OC factor level combination across the four subsets. This procedure ensured that the total set of vignettes was exhausted.

It is important to note that in comparison with a full factorial design (where all vignettes are administered to a single respondent), the partitioning of the vignette population into four equally sized subsets resulted in a subset effect reflecting potential differences in judgment from one set to another. Although not of substantive interest, the set effect had to be controlled for in our analysis prior to assessing the hypothesized effects in order to avoid confounding.

4.6.2 Study 1 - Sample and procedure

The sample included 179 soldiers from randomly selected units of all service branches in the German military (i.e. army, air force, and navy). Participation was voluntary and anonymous. The participants were informed about the purpose of the study and that their data would be treated confidentially. The average age of the respondents was 34.5 years ($SD = 8.9$) and their average service length was 15.8 years ($SD = 8.1$). 164 soldiers were male, and 15 were female. The vignettes were administered online and participants were assigned randomly to one of the four vignette subsets such that each subset contained an approximately equal number of participants (balanced design). As there were eight vignettes per subset, a total of $8 \times 179 = 1432$ measurements were taken. The sequence in which the vignettes were presented to respondents was randomized in order to minimize vignette-order effects. Furthermore, we counterbalanced the order of the conflict strategies within each scenario to reduce response-order effects. No data were missing for the outcome variables (i.e. Dominating, Integrating, Obliging, and Avoiding). Several covariates served as controls, including respondents' service length (in years), experience as unit leaders (yes/no), and social response bias (using five items from a German version of the Marlowe-Crowne Social Desirability Scale (SDS-MC); see Stöber (1999); sample item: "I never hesitate to go out of my way to help someone in trouble"; $\alpha = .71$). In addition, we controlled for respondents' actual commitment to both their current units and the German Armed Forces as a whole because these commitments could have interfered with participants' perception of the manipulated commitment factors in the vignette descriptions. The control commitments were each measured using three items of a validated German version of Allen and Meyer's (1990) Affective Commitment Scale (see Felfe and Franke (2012); sample items: "I am proud to be part of my unit"; "The German

Armed Forces have a great deal of personal meaning for me”; $\alpha = .94$ for the unit commitment items; $\alpha = .89$ for the GAF commitment items).

4.6.3 Study 1 - Analytical Strategy

The fact that multiple measurements were taken for each respondent gave rise to a two-level data structure, with the first level representing the vignette level and the second level representing the respondent level. We therefore used multilevel linear regression to analyze our data (Hox, Kreft, & Hermkens, 1991; Jasso, 2006; Raudenbush & Bryk, 2010). The procedure accounts for the dependency of measurements within respondents by adjusting regression estimates for the variances associated with respondent differences in average judgment. This is accomplished by declaring intercepts to be random effects (Tabachnick & Fidell, 2003). Random intercepts also enabled us to control for dispositional differences prior to assessing the hypothesized effects of TC and OC on the outcome variables.

Each outcome variable was regressed on a set of nested predictor models. First, an intercept-only model (model 0) was estimated to see if the nesting structure was consequential. The intraclass correlation coefficient (= ratio of the variance at respondent level to the variance at vignette level) was calculated to indicate the extent to which the nesting structure affected subsequent regression parameter estimates.⁷ Next, we introduced the set effect to account for possible judgment differences between respondents of different vignette sets (model 1). Scenario-based variations in respondents’ judgments were identified by adding the scenario factor (model 2), followed by the control variables (model 3). We then proceeded with the estimation of the main effects for TC and OC (model 4), and their two-way interaction (model 5). If TC x OC was found significant, a line graph was used to determine if the interaction was in keeping with our hypotheses. A model was considered to provide a good fit (and hence to be of value to the prediction of the outcome variable) if its -2 Loglikelihood value was significantly smaller than the -2 Loglikelihood value of the immediately preceding model.

⁷ High intraclass correlation values imply that the assumption of independence of errors is violated and that errors are correlated – that is, that the nesting structure matters. Barcikowski (1981) shows that even small intraclass correlations can inflate the Type I error rate of parameter estimates. For example, with 10 cases per group, an intraclass correlation of .01, and a nominal α of .05, the actual α level is .11.

Moreover, we calculated the proportional reduction of level 1 error variance associated with the inclusion of TC and OC (model 4) and the interaction TC x OC (model 5). This gave us an indication of the contribution made by these factors to explaining within-respondent variance in the outcome variable.

4.6.4 Study 1 - Results

Dominating. Table 1 shows the results for Dominating. The findings for the null model suggest that the clustering of the vignette data within respondents was consequential. Adding the set effect (model 1) did not lead to a better model fit: $\chi^2(3, N = 1432) = 5057.22 - 5055.42 = 1.80, p > .05$. Hence, no systematic judgment differences between respondents of different vignette sets were observed. Introducing the scenario factor (model 2) did lead to an improved model, $\chi^2(7, N = 1432) = 5055.42 - 4995.78 = 59.64, p < .01$, suggesting that some scenarios were more likely than others to elicit a Dominating response from participants. After entering the controls (model 3), model fit was further enhanced by adding TC and OC (model 4): $\chi^2(2, N = 1432) = 4985.49 - 4790.29 = 195.2, p < .01$. Variance at the vignette level dropped from 1.86 to 1.59 (cf. model 4 to model 3), meaning that $(1 - 1.59/1.86) = 14.5$ per cent of additional variance at the vignette level could be explained by TC and OC. While TC had a positive effect on Dominating ($b = .57, p < .01$), the effect of OC was negative ($b = -.80, p < .01$). Hypothesis 1 that TC has a more positive effect on Dominating when OC is low and a less positive effect when OC is high was supported (cf. Figure 2). The highest level of Dominating could thus be observed at the high TC - low OC combination. Entering the interaction term ($b = -1.13, p < .01$) led to a better model fit (model 5), $\chi^2(1, N = 1432) = 4790.29 - 4717.96 = 72.33, p < .01$, and explained $(1 - 1.50/1.59) = 5.7$ per cent of additional variance occurring at the vignette level.

Table 2: *Multilevel Estimates for Dominating (Random Intercept Model)*

| | Model 0 | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---------------------|--------------|--------------|--------------|--------------|--------------|---------------|
| | Coef. (S.E.) |
| Constant | 2.61 (.04)** | 2.54 (.10)** | 2.40 (.10)** | 2.58 (.29)** | 2.67 (.29)** | 2.40 (.14)** |
| Set | | | | | | |
| Set 1 (ref.) | | | | | | |
| Set 2 | | .12 (.12) | .12 (.12) | .02 (.13) | .02 (.13) | .02 (.13) |
| Set 3 | | .13 (.13) | .13 (.14) | .11 (.14) | .11 (.14) | .11 (.14) |
| Set 4 | | .01 (.13) | .01 (.14) | -.06 (.13) | -.06 (.13) | -.06 (.13) |
| Scenario | | | | | | |
| Scenario 1 (ref.) | | | | | | |
| Scenario 2 | | | -.07 (.14) | -.07 (.14) | -.02 (.13) | -.03 (.13) |
| Scenario 3 | | | -.57 (.14)** | -.57 (.14)** | -.52 (.13)** | -.53 (.13)** |
| Scenario 4 | | | .50 (.14)** | .50 (.14)** | .43 (.13)** | .34 (.13)** |
| Scenario 5 | | | .09 (.14) | .09 (.14) | .02 (.13) | -.07 (.13) |
| Scenario 6 | | | -.12 (.14) | -.12 (.14) | .01 (.13) | -.07 (.13) |
| Scenario 7 | | | .09 (.14) | .09 (.14) | .05 (.13) | -.03 (.13) |
| Scenario 8 | | | .18 (.14) | .18 (.14) | .18 (.13) | .18 (.13) |
| Leadership exp. | | | | | | |
| no (ref.) | | | | | | |
| yes | | | | .03 (.14) | .03 (.14) | .03 (.14) |
| Service length | | | | -.01 (.01) | -.01 (.01) | -.01 (.01) |
| Social desirability | | | | .13 (.05)* | .13 (.05)* | .13 (.05)* |
| Commitment unit | | | | -.09 (.05) | -.09 (.05) | -.09 (.05) |
| Commitment GAF | | | | .01 (.05) | .01 (.05) | .01 (.05) |
| TC | | | | | | |
| low (ref.) | | | | | | |
| high | | | | | .57 (.07)** | 1.14 (.09)** |
| OC | | | | | | |
| low (ref.) | | | | | | |
| high | | | | | -.80 (.07)** | -.23 (.09)** |
| TC x OC | | | | | | -1.13 (.13)** |
| Variance vignette | 1.96 (.08)** | 1.95 (.08)** | 1.86 (.07)** | 1.86 (.07)** | 1.59 (.06)** | 1.50 (.06)** |
| Variance respondent | .10 (.04)** | .10 (.04)** | .11 (.04)** | .09 (.04)** | .12 (.04)** | .13 (.04)** |
| ICC | .05 | .05 | .06 | .05 | .07 | .09 |
| -2 Log Likelihood | 5057.22 | 5055.42 | 4995.78 | 4985.49 | 4790.29 | 4717.96 |

Note. The coefficients (coef.) relate to the 5-point scale from 1 (totally disagree) to 5 (totally agree). Standard errors (S.E.) are given in parentheses. Reference categories are indicated by (ref.). The intraclass correlation coefficient (ICC) is defined as the ratio of the variance at the respondent level to the variance at the vignette level.

*p < .05, **p < .01

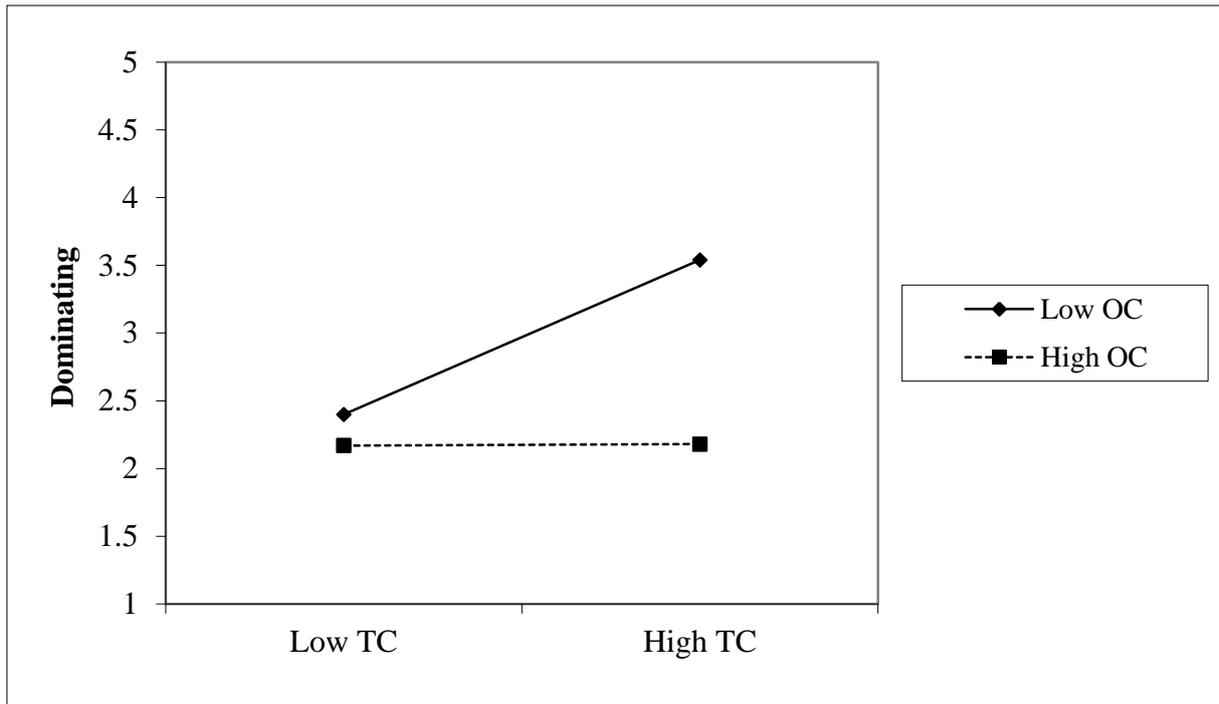


Figure 4: Organizational commitment as a moderator of the relationship between team commitment and Dominating (Study 1)

Integrating. Table 2 shows the results for Integrating. A considerable amount of variability in this outcome is explained by the fact that the vignette data were grouped within respondents (cf. model 0, intraclass correlation = .28). Introducing the set effect (model 1) and the scenario effect (model 2) led to enhanced fit indices, as indicated by $\chi^2(3, N = 1432) = 5048.31 - 5027.72 = 20.59, p < .01$ for model 1 and $\chi^2(7, N = 1432) = 5027.72 - 4917.74 = 109.98, p < .01$ for model 2. After entry of the controls (model 3), further improvements were made by adding TC and OC (model 4), $\chi^2(2, N = 1432) = 4842.72 - 4723.38 = 119.34, p < .01$, as well as TC x OC (model 5), $\chi^2(1, N = 1432) = 4723.38 - 4670.75 = 52.63, p < .01$. Overall, TC and OC accounted for $(1 - 1.46/1.60) = 8.8$ per cent of the remaining variance at the vignette level. Still another $(1 - 1.40/1.46) = 4.1$ per cent was explained by TC x OC. Both commitments had a main positive effect (cf. model 4, $b = .45, p < .01$ for TC and $b = .57, p < .01$ for OC). In line with H2, we observed a significant interaction such that the effect of TC was stronger when OC was high ($b = .93, p < .01$; see model 4 in combination with Figure 2). Consequently, Integrating was most likely when both TC and OC were high.

Table 3: *Multilevel Estimates for Integrating (Random Intercept Model)*

| | Model 0 | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Coef. (S.E.) |
| Constant | 3.56 (.06)** | 3.37 (.13)** | 3.31 (.16)** | 1.25 (.14)** | .81 (.32)** | 1.01 (.33)** |
| Set | | | | | | |
| Set 1 (ref.) | | | | | | |
| Set 2 | | .54 (.16)** | .54 (.16)** | .27 (.15) | .27 (.15) | .27 (.15) |
| Set 3 | | -.15 (.18) | -.15 (.18) | -.08 (.15) | -.08 (.15) | -.08 (.15) |
| Set 4 | | .12 (.18) | .12 (.18) | -.06 (.15) | -.06 (.15) | -.06 (.15) |
| Scenario | | | | | | |
| Scenario 1 (ref.) | | | | | | |
| Scenario 2 | | | -.03 (.13) | .03 (.13) | -.12 (.13) | -.11 (.13) |
| Scenario 3 | | | -.01 (.13) | -.01 (.13) | -.14 (.13) | -.13 (.13) |
| Scenario 4 | | | -.72 (.13)** | -.72 (.13)** | -.77 (.13)** | -.70 (.13)** |
| Scenario 5 | | | .29 (.13)* | .29 (.13)* | .23 (.13) | .30 (.13) |
| Scenario 6 | | | .13 (.13) | .13 (.13) | .05 (.13) | .11 (.13) |
| Scenario 7 | | | .12 (.13) | .12 (.13) | .04 (.13) | .11 (.13) |
| Scenario 8 | | | .66 (.13)** | .66 (.13)** | .66 (.13)** | .66 (.13)** |
| Leadership exp. | | | | | | |
| no (ref.) | | | | | | |
| yes | | | | .02 (.16) | .02 (.16) | .02 (.16) |
| Service length | | | | .01 (.01) | .01 (.01) | .01 (.01) |
| Social desirability | | | | .49 (.06)** | .49 (.06)** | .49 (.06)** |
| Commitment unit | | | | -.14 (.05)** | -.14 (.05)** | -.14 (.05)** |
| Commitment GAF | | | | .23 (.06)** | .23 (.05)** | .23 (.05)** |
| TC | | | | | | |
| low (ref.) | | | | | | |
| high | | | | | .45 (.06)** | -.02 (.09) |
| OC | | | | | | |
| low (ref.) | | | | | | |
| high | | | | | .57 (.06)** | .11 (.09) |
| TC x OC | | | | | | .93 (.13)** |
| Variance vignette | 1.75 (.07)** | 1.75 (.08)** | 1.61 (.06)** | 1.60 (.06)** | 1.46 (.06)** | 1.40 (.06)** |
| Variance respondent | .48 (.08)** | .41 (.04)** | .43 (.07)** | .21 (.07)** | .23 (.04)** | .24 (.04)** |
| ICC | .28 | .23 | .26 | .13 | .16 | .17 |
| -2 Log Likelihood | 5048.31 | 5027.72 | 4917.74 | 4842.72 | 4723.38 | 4670.75 |

Note. The coefficients (coef.) relate to the 5-point scale from 1 (totally disagree) to 5 (totally agree). Standard errors (S.E.) are given in parentheses. Reference categories are indicated by (ref.). The intraclass correlation coefficient (ICC) is defined as the ratio of the variance at the respondent level to the variance at the vignette level.

*p < .05, **p < .01

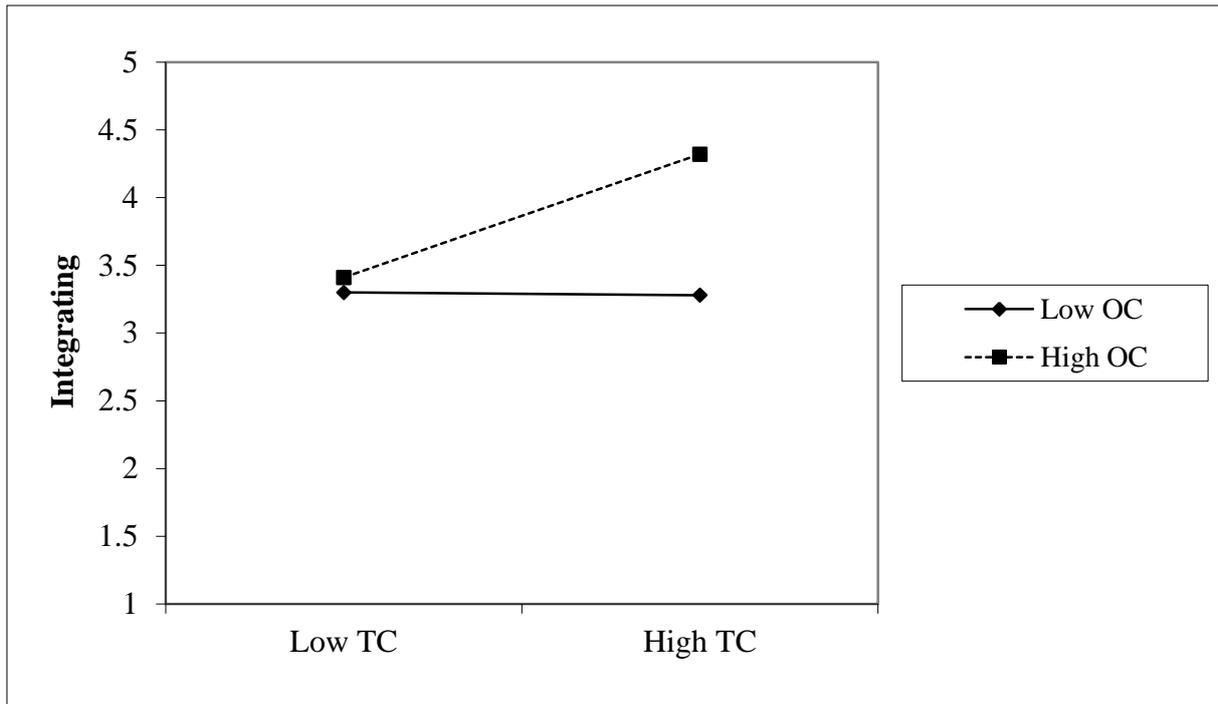


Figure 5: Organizational commitment as a moderator of the relationship between team commitment and Integrating (Study 1)

Obliging. The results for Obliging are presented in Table 3. The clustering of the vignette data within respondents appeared to have no influence (cf. model 0, intraclass correlation = 0.0). Improvements in model fit were made by entering the scenario factor (model 2), $\chi^2 (7, N = 1432) = 4953.18 - 4855.08 = 98.1, p < .01$, TC and OC (model 4), $\chi^2 (2, N = 1432) = 4726.98 - 4849.76 = 122.8, p < .01$, and TC x OC (model 5), $\chi^2 (1, N = 1432) = 4719.66 - 4726.98 = 7.3, p < .01$. No improvement was made by adding the set effect and the controls. TC and OC together accounted for $(1 - 1.62/1.76) = 8.0$ per cent of incremental level 1 variance. As expected, Obliging was negatively affected by TC ($b = -.53, p < .01$), and positively by OC ($b = .56, p < .01$). Furthermore, in line with H3, TC moderated the positive effect of OC such that it was less strong if TC was high rather than low ($b = -.37, p < .01$). The highest level of Obliging thus occurred when OC was high but TC was low.

Table 4: *Multilevel Estimates for Obliging (Random Intercept Model)*

| | Model 0 | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Coef. (S.E.) |
| Constant | 2.51 (.04)** | 2.43 (.08)** | 2.45 (.12)** | 2.39 (.12)** | 2.37 (.13)** | 2.31 (.24)** |
| Set | | | | | | |
| Set 1 (ref.) | | | | | | |
| Set 2 | | .05 (.10) | .05 (.10) | .11 (.10) | .11 (.10) | .11 (.10) |
| Set 3 | | .21 (.11) | .21 (.11)* | .21 (.11) | .21 (.11)* | .21 (.11)* |
| Set 4 | | .09 (.11) | .09 (.11) | .08 (.11) | .08 (.11) | .08 (.11) |
| Scenario | | | | | | |
| Scenario 1 (ref.) | | | | | | |
| Scenario 2 | | | .01 (.14) | .01 (.14) | .00 (.14) | .00 (.14) |
| Scenario 3 | | | .65 (.14)** | .65 (.14)** | .63 (.14)** | .63 (.14)** |
| Scenario 4 | | | -.47 (.14)** | -.47 (.14)** | -.41 (.14)** | -.43 (.14)** |
| Scenario 5 | | | .26 (.14) | .26 (.14) | .32 (.14)* | .30 (.14)* |
| Scenario 6 | | | -.22 (.14) | -.22 (.14) | -.32 (.14)* | -.34 (.14)* |
| Scenario 7 | | | -.49 (.14)** | -.49 (.14)** | -.59 (.14)** | -.62 (.14)** |
| Scenario 8 | | | .12 (.14) | .12 (.14) | .12 (.13) | .12 (.13) |
| Leadership exp. | | | | | | |
| no (ref.) | | | | | | |
| yes | | | | -.13 (.12) | -.13 (.11) | -.13 (.11) |
| Service length | | | | .00 (.00) | .00 (.00) | .00 (.00) |
| Social desirability | | | | -.02 (.04) | -.02 (.04) | -.02 (.04) |
| Commitment unit | | | | .00 (.04) | .00 (.04) | .00 (.04) |
| Commitment GAF | | | | .08 (.04) | .08 (.04) | .08 (.04) |
| TC | | | | | | |
| low (ref.) | | | | | | |
| high | | | | | -.53 (.07)** | -.35 (.10)** |
| OC | | | | | | |
| low (ref.) | | | | | | |
| high | | | | | .56 (.07)** | .74 (.10)** |
| TC x OC | | | | | | -.37 (.14)** |
| Variance vignette | 1.90 (.07)** | 1.90 (.07)** | 1.77 (.07)** | 1.76 (.07)** | 1.62 (.06)** | 1.61 (.06)** |
| Variance respondent | .00 (.02) | .00 (.02) | .00 (.02) | .00 (.00) | .00 (.00) | .00 (.00) |
| ICC | .00 | .00 | .00 | .00 | .00 | .00 |
| -2 Log Likelihood | 4957.29 | 4953.18 | 4855.08 | 4849.76 | 4726.98 | 4719.66 |

Note. The coefficients (coef.) relate to the 5-point scale from 1 (totally disagree) to 5 (totally agree). Standard errors (S.E.) are given in parentheses. Reference categories are indicated by (ref.). The intraclass correlation coefficient (ICC) is defined as the ratio of the variance at the respondent level to the variance at the vignette level.

*p < .05, **p < .01

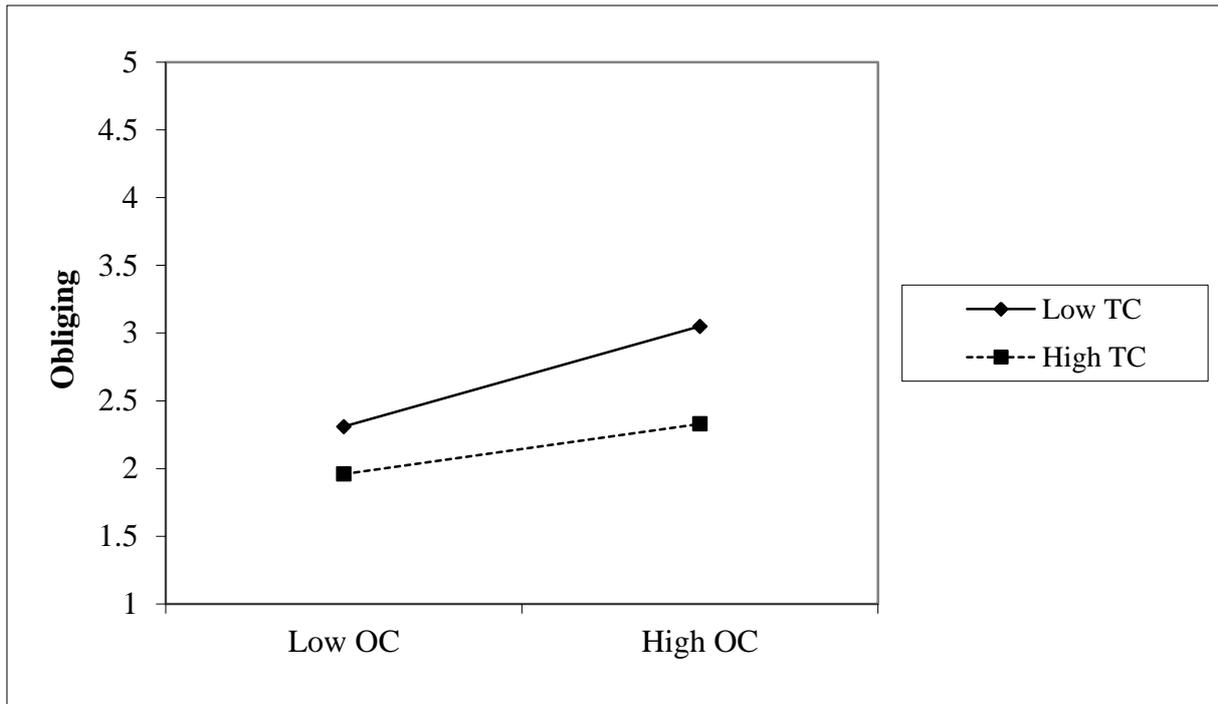


Figure 6: Team commitment as a moderator of the relationship between organizational commitment and Obliging (Study 1)

Avoiding. Table 4 shows the results for Avoiding. The intraclass correlation of .12 indicates a meaningful average difference between respondents on this outcome variable. Enhanced model fits were obtained from inclusion of the set effect (model 1), $\chi^2(3, N = 1432) = 4994.88 - 4852.20 = 42.68, p < .01$; the scenario effect (model 2), $\chi^2(7, N = 1432) = 4852.20 - 3899.39 = 952.81, p < .01$; TC and OC (model 4), $\chi^2(2, N = 1432) = 3867.73 - 3791.10 = 75.83, p < .01$; and TC x OC (model 4), $\chi^2(1, N = 1432) = 3791.10 - 3749.51 = 42.39, p < .01$. Together, TC and OC explained $(1 - .79/.84) = 6.0$ per cent of incremental variance within respondents after accounting for the set effect and the scenario effect; TC x OC explained another $(1 - .77/.79) = 2.5$ per cent of the variance. TC and OC both had a negative main effect on Avoiding, as evidenced by their negative slopes ($b = -.56, p < .01$, for TC; and $b = -.65, p < .01$, for OC). The hypothesized compensatory effect (i.e. a stronger, more negative effect of TC on Avoiding when OC is low) was borne out ($b = .62, p < .01$; model 5 in combination with Figure 4). The highest levels of Avoiding were attained when both OC and TC were low.

Table 5: *Multilevel Estimates for Avoiding (Random Intercept Model)*

| | Model 0 | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Coef. (S.E.) |
| Constant | 1.60 (.04)** | 1.61 (.07)** | 1.28 (.10)** | 2.14 (.20)** | 2.39 (.20)** | 2.52 (.20)** |
| Set | | | | | | |
| Set 1 (ref.) | | | | | | |
| Set 2 | | -.27 (.09)** | -.27 (.09)** | -.16 (.09) | -.16 (.09) | -.16 (.09) |
| Set 3 | | .33 (.10)** | .33 (.10)** | .28 (.09)** | .28 (.09)** | .28 (.09)** |
| Set 4 | | .03 (.10) | .03 (.10) | .07 (.09) | .07 (.09) | .07 (.09) |
| Scenario | | | | | | |
| Scenario 1 (ref.) | | | | | | |
| Scenario 2 | | | 0.96 (.10)** | 0.96 (.10)** | 1.05 (.10)** | 1.05 (.09)** |
| Scenario 3 | | | .67 (.10)** | .67 (.10)** | .76 (.10)** | .76 (.09)** |
| Scenario 4 | | | .23 (.10)* | .23 (.10)* | .26 (.09)** | .31 (.09)** |
| Scenario 5 | | | .31 (.10)** | .31 (.10)** | .34 (.09)** | .39 (.09)** |
| Scenario 6 | | | .19 (.10)* | .19 (.10)* | .24 (.09)* | .28 (.09)** |
| Scenario 7 | | | .32 (.10)** | .32 (.10)** | .37 (.09)** | .41 (.09)** |
| Scenario 8 | | | -.02 (.09) | -.02 (.10) | -.02 (.09) | -.02 (.09) |
| Leadership exp. | | | | | | |
| no (ref.) | | | | | | |
| yes | | | | -.01 (.10) | -.01 (.10) | -.01 (.10) |
| Service length | | | | -.01 (.00) | -.01 (.00) | -.01 (.00) |
| Social desirability | | | | -.17 (.04)** | -.17 (.04)** | -.17 (.04)** |
| Commitment unit | | | | .01 (.03) | .01 (.03) | .01 (.03) |
| Commitment GAF | | | | -.04 (.04) | -.04 (.04) | -.04 (.04) |
| TC | | | | | | |
| low (ref.) | | | | | | |
| high | | | | | -.25 (.05)** | -.56 (.07)** |
| OC | | | | | | |
| low (ref.) | | | | | | |
| high | | | | | -.34 (.05)** | -.65 (.07)** |
| TC x OC | | | | | | .62 (.09)** |
| Variance vignette | .95 (.04)** | .95 (.04)** | .84 (.03)** | .84 (.03)** | .79 (.03)** | .77 (.03)** |
| Variance respondent | .11 (.03)** | .06 (.02)** | .08 (.02)** | .05 (.02)** | .05 (.02)** | .06 (.02)** |
| ICC | .12 | .07 | .09 | .06 | .06 | .08 |
| -2 Log Likelihood | 4094.88 | 4052.20 | 3899.39 | 3867.73 | 3791.90 | 3749.51 |

Note. The coefficients (coef.) relate to the 5-point scale from 1 (totally disagree) to 5 (totally agree). Standard errors (S.E.) are given in parentheses. Reference categories are indicated by (ref.). The intraclass correlation coefficient (ICC) is defined as the ratio of the variance at the respondent level to the variance at the vignette level.

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

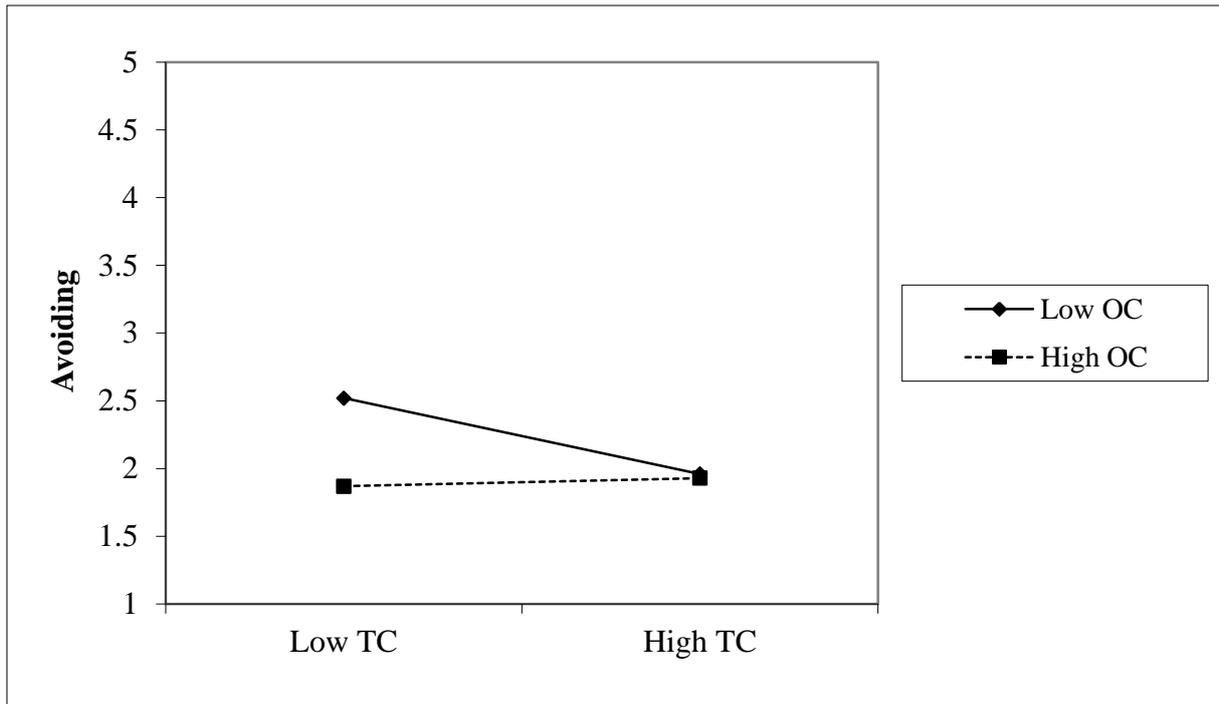


Figure 7: Organizational commitment as a moderator of the relationship between team commitment and Avoiding (Study 1)

Summary of results. The results of the vignette experiment supported all four hypotheses in terms of both the nature of the interaction and the TC-OC pattern that makes a conflict strategy most likely relative to other commitment patterns.

4.7 Study 2: Survey

4.7.1 Study 2 - Sample and procedure

Our sample size considerations were led by literature guidelines according to which a minimum number of 500 participants is required to obtain sufficient power for detecting two-way interactions in correlational research designs (Judd, Yzerbyt, & Muller, 2000;

McClelland & Judd, 1993).⁸ Hence, based on an estimated response rate of 10%, we invited more than 5'000 members of the German military to participate in the survey. The questionnaire was administered online and, where online access was not available, in a paper-and-pencil version that was sent out and returned by mail. Both versions were pilot-tested for errors and ease-of-use. Participants were informed that participation is voluntary and that their data would be treated confidentially. 692 questionnaires were returned and useable for analysis. The sample consisted of 632 males and 58 females. The average age was 35.1 years ($SD = 9.0$). Thirty-six percent had an organizational tenure of at least ten years, and 35% were members of their current team for five years or more. The teams to which participants belonged included functional, cross-functional, autonomous and semi-autonomous units.

4.7.2 Study 2 - Measures

Interteam conflict management. The four conflict management strategies were measured with three items each. The items were taken from a validated German version of Rahim's (1983) Organizational Conflict Inventory (ROCI-II), Form C, for peers (Bilsky & Wülker, 2000). In line with the procedure suggested by Rahim (2011), we modified the items to measure the strategies used by participants in handling interteam conflicts in the organization. For example, the item "I use my expertise to make a decision in my favor" was altered to "I use my expertise to make a decision in favor of my team". The order of the items was randomized to avoid question-order effects. Prior to the presentation of the items, participants were asked to read a short definition of the term "interteam conflict" and indicate how often

⁸ In study 1 (experiment), we were able to maximize the variance of the two independent variables (TC and OC) by locating all observations at the most extreme corners of the joint distribution (high on TC and high on OC, high on TC and low on OC, etc.). According to McClelland and Judd (1993), this is the ideal case for detecting interactive effects given some constant N. However, study 2 (survey) involved measured rather than manipulated independent variables, which made the occurrence of an extreme joint distribution unlikely. Instead, a bivariate normal distribution was observed. McClelland and Judge show that such a joint bivariate normal distribution may require up to 17 times the number of observations to have the equivalent power to detect an interaction compared with the optimal four-corner design.

they experience such conflict between their team and other teams in the organization (1 = never to 5 = very often). Responses on the conflict management items were then captured on a 5-point Likert scale, with higher scores indicating stronger preference for a conflict strategy. Reliability analyses showed sufficiently consistent responses for Dominating (Cronbach's $\alpha = .67$), Integrating ($\alpha = .87$), and Avoiding ($\alpha = .87$). However, one Obliging item had to be dropped to render the Obliging subscale more reliable ($\alpha = .69$).

Organizational and team commitment. Franke & Felfe's (2012) validated German translation of Allen and Meyer's (1990) Affective Commitment Scale provided four items for the measurement of organizational commitment (example: "I feel a strong sense of belonging to this organization"), and three items for the measurement of team commitment (example: "I am proud to be part of this team"). Responses were recorded on a 5-point Likert scale ranging from "totally disagree" (1) to "totally agree" (5). Both scales showed high reliabilities (α for OC scale = .82; α for TC scale = .87).

Control variables. We controlled for gender (male/female), team tenure (= number of years within the team), organizational tenure (= number of years within the organization) and frequency of interteam conflict (measured as outlined above). Furthermore, cooperative goal interdependence between teams was included as a control, as this variable may be confounded with categorization processes in affecting intergroup attitudes and behavior (Deutsch, 2000; Kramer, 1991). Three items adapted from Van der Vegt and Janssen (2003) tapped into the extent to which respondents perceived the attainment of their teams' goals to be dependent on other teams (example item: "My team is largely dependent on the other team to achieve organizational goals"). The items were scored on a 5-point Likert scale (from 1 = "totally disagree"; 5 = "totally agree"). Scale reliability was acceptable ($\alpha = .71$).

4.7.3 Study 2 - Analytical Strategy

We tested our hypotheses by hierarchically regressing each of the four dependent variables (Dominating, Integrating, Obliging, Avoiding) on three blocks of independent variables. The controls were entered in the first block (model 1), the main effects of TC and OC in the second (model 2), and the two-way interaction (TC x OC) in the third (model 3). A line graph was used to facilitate interpretation of the interaction if it was found significant. Following

Aiken and West's (1991) guidelines, we plotted the simple slopes of the predictor (e.g. TC) at -1 SD and +1 SD from the mean of the moderator (e.g. OC). Both commitment scales were centred prior to regression to avoid issues of multicollinearity. Variance inflation factor (VIF) scores varied from 1.00 to 1.24 across the analyses, suggesting that multicollinearity did not distort results. Examination of normality, linearity, and homoscedasticity based on residuals scatterplots revealed no serious violations of regression assumptions.

4.7.4 Study 2 - Results

Means and Intercorrelations. Table 5 shows the means, standard deviations and intercorrelations of our study variables. The results of the regression analyses for all four conflict management strategies are displayed in Table 6. As Ashforth and Johnson (2001) have pointed out, some employees may perceive a great overlap between their team and organizational membership, and may thus not discriminate between their team and organizational commitment. We used confirmatory factor analysis to find out whether our participants considered their team and the organization to be different attachment targets. A two-factor model with TC and OC as separate factors ($\chi^2 = 51.0$; $df = 13$; GFI = .97; RMSEA = .07) showed a significantly better fit than a one-factor model with team and organizational commitment scales collapsed ($\chi^2 = 827.7$; $df = 14$; GFI = .71; RMSEA = .30; $\Delta \chi^2 = 776.7$; $\Delta df = 1$; $p < .001$). In conjunction with the observed moderate correlation between TC and OC ($r = .37$; $p < .01$), this finding indicates that participants may indeed have felt differentially committed to both targets. Another confirmatory factor analysis was run to check if the four conflict management strategies were perceived as sufficiently distinct. As expected, the postulated four-factor structure ($\chi^2 = 100.5$; $df = 38$; GFI = .97; RMSEA = .05) replicated the data significantly better than alternative models where all possible combinations of strategies were merged to form either a single-factor, two-factor or three-factor models.⁹

⁹ Competing models were: a) four three-factor models where each pair of conflict strategies was collapsed into a single factor while the remaining strategies remained separate factors (e.g. Dominating, Integrating, Obliging - Avoiding); b) four two-factor models where each combination of pairs of strategies was collapsed to form two factors (e.g. Dominating - Integrating, Obliging - Avoiding); c) a single-factor model. The fit indices for these models can be obtained from the authors upon request.

Table 6: *Means and Intercorrelations*

| Variables | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------------------------|------|-----|------|------|------|------|-----|------|-----|
| 1. Dominating | 3.3 | 0.8 | | | | | | | |
| 2. Integrating | 3.8 | 0.9 | .22 | | | | | | |
| 3. Obliging | 2.6 | 0.8 | .06 | -.39 | | | | | |
| 4. Avoiding | 2.3 | 0.9 | -.23 | -.52 | -.20 | | | | |
| 5. OC | 3.0 | 1.0 | .10 | .28 | .15 | -.19 | | | |
| 6. TC | 3.6 | 1.0 | .26 | .16 | .15 | -.23 | .37 | | |
| 7. Conflict frequency | 3.0 | 1.0 | .14 | .11 | .10 | -.18 | .02 | -.07 | |
| 8. Goal interdependence | 2.9 | 0.9 | .17 | .24 | .16 | -.21 | .03 | .10 | .18 |

Note. *n*'s are ranging from 606 to 687. All correlations above |.07| are significant at the .05 level

Dominating. We hypothesized that the positive main effect of TC on Dominating would be less positive at higher levels of OC (H1). Results displayed in Table 6 (model 2a and 3a) in combination with Figure 5 support this prediction, as indicated by a positive beta coefficient for TC ($\beta = .26, p < .01$) and a highly significant interaction term TC x OC ($\beta = -.12, p < .01$). Also, the highest level of Dominating results when TC is high and OC is low, as expected. R^2 was significantly different from 0 for each block of independent variables. Taken together, the three blocks explained 13% of the variance in Dominating (model 3a). TC and OC induced an R^2 -change of six percent ($p < .01$), while their interaction term contributed another one percent ($p < .01$) to the model's overall predictive ability.

Table 7: Results of Multiple Regression Analysis for the Four Conflict Management Strategies (Study 2)^a

| Variables | Dominating | | | Integrating | | | Obliging | | | Avoiding | | |
|------------------------------|------------|--------|--------|-------------|---------|---------|----------|--------|--------|----------|---------|---------|
| | 1a | 2a | 3a | 1b | 2b | 3b | 1c | 2c | 3c | 1d | 2d | 3d |
| Block 1: Controls | | | | | | | | | | | | |
| Gender | | | | | | | | | | | | |
| Male (ref.) | | | | | | | | | | | | |
| Female | .00 | .00 | .00 | .05 | .05 | .05 | -.03 | -.03 | -.03 | -.02 | -.02 | -.03 |
| Team tenure | | | | | | | | | | | | |
| 1 - 4 years (ref.) | | | | | | | | | | | | |
| 5 - 9 years | .05 | .05 | .05 | -.05 | -.04 | -.04 | -.03 | -.03 | -.03 | .08 | .07 | .07 |
| 10 years or more | -.06 | -.05 | -.05 | .01 | .02 | .03 | -.02 | -.01 | -.01 | .01 | .00 | .00 |
| Organizational tenure | | | | | | | | | | | | |
| 1 - 4 years (ref.) | | | | | | | | | | | | |
| 5 - 9 years | -.03 | -.03 | -.03 | .10 | .11* | .12* | .03 | .04 | .04 | -.12** | -.13** | -.13** |
| 10 years or more | .08 | .05 | .06 | .31** | .33** | .27** | .11* | .09 | .08 | -.36** | -.33** | -.33** |
| Conflict frequency | .10* | .10* | .10* | .02 | .04 | .04 | .06 | .07 | .07 | -.09** | -.10** | -.10** |
| Goal interdependence | .13** | .14** | .13** | .18** | .16** | .16** | .13** | .12** | .12** | -.12** | -.11** | -.12** |
| Block 2: Main effects | | | | | | | | | | | | |
| TC | | .26** | .25** | | .05 | .05 | | .10* | .10* | | -.17** | -.17** |
| OC | | -.01 | -.04 | | .23** | .26** | | .09* | .11* | | -.11** | -.12** |
| Block 3: Two-way interaction | | | | | | | | | | | | |
| TC x OC | | | -.12** | | | .11** | | | .07 | | | -.04 |
| ΔR^2 | | .06 | .01 | | .06 | .01 | | .02 | .00 | | .05 | .00 |
| F for ΔR^2 | | 3.90** | 0.14** | | 2.89** | -0.53** | | 1.07** | -.20 | | 1.44** | -1.57 |
| R ² | .05 | .11 | .13 | .13 | .19 | .20 | .04 | .06 | .06 | .15 | .20 | .21 |
| F for R ² | 4.57** | 8.47** | 8.61** | 12.59** | 15.48** | 14.59** | 3.47** | 4.54** | 4.34** | 15.67** | 17.11** | 15.54** |

^a Standardized regression coefficients are shown.

^b Changes in R² are from the immediately preceding block.

*p < .05, **p < .01

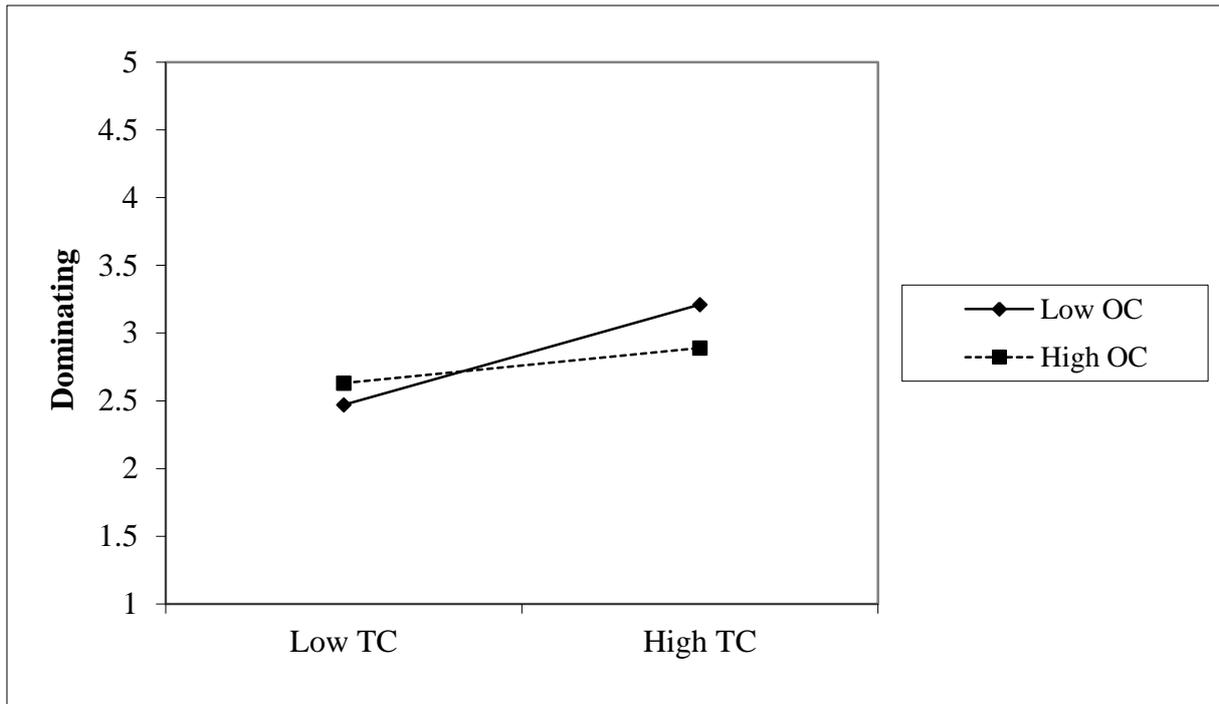


Figure 8: Organizational commitment as a moderator of the relationship between team commitment and Dominating (Study 2)

Integrating. H2 predicted a positive relationship between TC and Integrating that would be stronger at higher levels of OC. The results in model 3b, Table 6, confirm these predictions. While the main effect of TC was positive but not significant ($\beta = .05, p = .24$), the interaction term was significant and in the hypothesized direction ($\beta = .11, p < .01$). Figure 6 shows that the highest level of Integrating resulted when both TC and OC were high. The full regression model (model 3b) accounted for 20% of the variance in Integrating. Six percent of this variance was attributable to TC and OC ($p < .01$) and another one percent to TC x OC ($p < .01$), as indicated by the R^2 - changes for models 2b and 3b.

Obliging. The results for Obliging show a positive main effect for OC ($\beta = .09, p < .01$) and, surprisingly, also for TC ($\beta = .10, p < .01$; see model 2c). The hypothesized interaction (H3) was not borne out ($\beta = .07, p = .09$).

Avoiding. Negative effects on Avoiding were expected for both TC and OC. Results from Table 6, model 2d, confirm these predictions, as indicated by a negative beta coefficient for TC ($\beta = -.17, p < .01$) and OC ($\beta = -.11, p < .01$). However, no significant interaction was

observed ($\beta = -.04, p = .19$; see model 3d), suggesting that the effects of TC and OC are additive. H4 was thus partially confirmed. While the hypothesized compensatory effect was not borne out, the additive effect resulted in the highest level of Avoiding if both commitments are low. TC and OC incrementally increased R^2 by five percent ($p < .01$), leading to a total of 21% of explained variance in the outcome based on the overall regression model (2d).

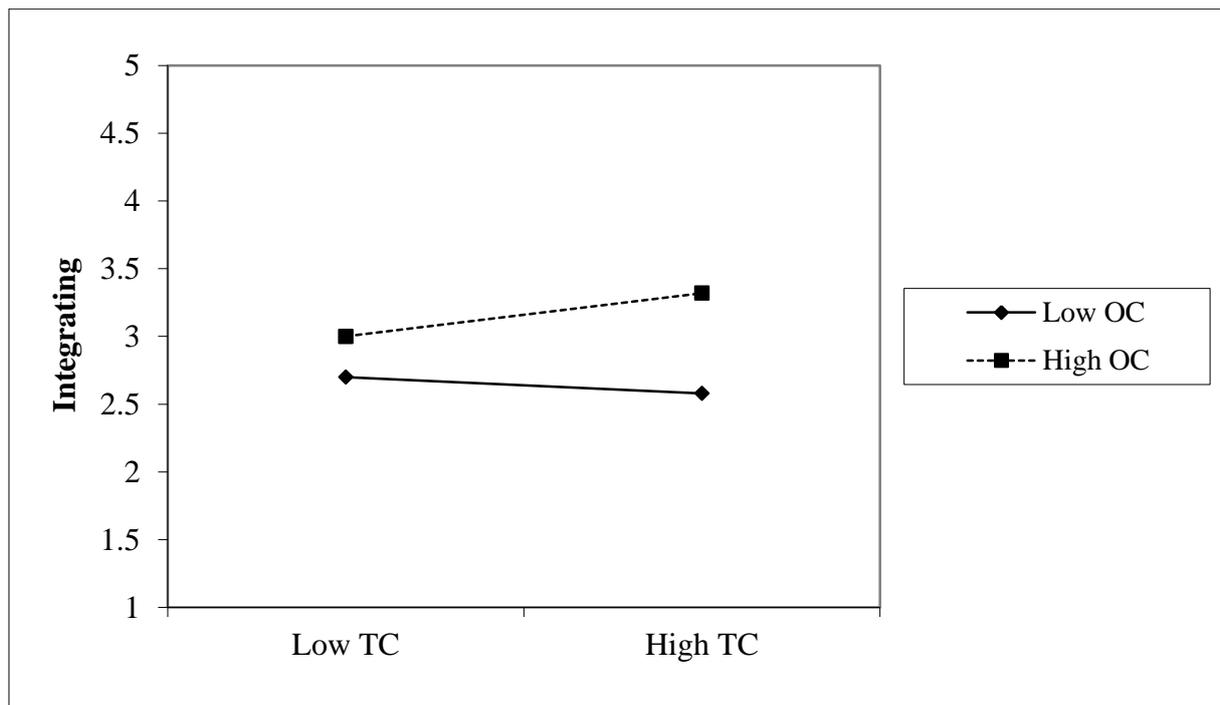


Figure 9: Organizational commitment as a moderator of the relationship between team commitment and Integrating (Study 2)

Summary of results. While the vignette experiment supported all four hypotheses, the survey study confirmed the hypothesized interactions for Dominating (H1) and Integrating (H2); a positive main effect of OC on Obliging; and the negative main effects of TC and OC on Avoiding. However, study 2 showed no significant interactions for Obliging and Avoiding (H3 and H4).

4.8 Discussion

Conflicts between teams are part and parcel of normal organizational life, arising from scarce resources and differences in aims and orientations. Our research has examined how employees' interteam conflict handling preferences are affected by the interplay of their team and organizational commitment. Doing so allowed us to assess the views of three different theoretical models (i.e. common ingroup identity model, mutual intergroup differentiation model, ingroup projection model) within the context of organizationally nested interteam conflict. Extending previous work, we incorporated the social dilemma character of interteam conflict and differentiated between four different conflict management strategies. Furthermore, we addressed the open question if employees' conflict handling preferences would also be dysfunctional for the organization if they felt committed to the organization but not to their team. Our hypotheses were that a) TC and OC reinforce each other in the promotion of Integrating to maximize the benefit for the organization; b) that OC without TC leads to the neglect of own team concerns (Obliging), thus making this combination as dysfunctional for the organization as TC without OC (leading to Dominating); and that c) either TC or OC alone is enough to make Avoiding an unlikely conflict strategy. Results were obtained from a vignette experiment and a field survey among military professionals which enabled the causal testing and cross validation of our hypotheses based on realistic cases of interteam conflict.

Overall, our results largely supported our hypotheses. With regard to Dominating, both the experimental and the survey data showed an increase in the preference for this conflict strategy if individuals felt committed to their team but not to the organization as a whole. Such a preference can have serious consequences. Apart from failing to meet organizational goals, it may involve jeopardizing the well-being of the members of the other team. There is thus a clear indication that a strong TC may be undesirable or even harmful when collaboration across teams is mandatory but the perception of a common cause is weak or missing. While this finding may be seen as supporting recategorization strategies and the common ingroup identity perspective, our results for Integrating, Obliging and Avoiding clearly support the dual commitment / mutual intergroup differentiation perspective.

With regard to Integrating, TC and OC have been found to enhance each other to maximize the chances of Integrating, as shown in both the experiment and the survey study. Apparently, being dually committed encourages individuals to think, feel, and act in terms of both their team and the organization as a whole. This is an essential prerequisite for achieving win-win agreements that reconcile the seemingly opposed aspirations of the conflict parties for the good of the organization. Hence - while TC may be a risk with regard to Dominating -, it is at the same time essential to ensure organizationally effective conflict handling. The prediction derived from the ingroup projection model that dually committed team members would be biased toward members of the other team, especially since the teams were fully nested in the organization, could not be supported.

With regard to Obliging, our experimental findings indicate that a low TC and a strong OC increases employees' preference for this strategy more than any other commitment pattern. Like Dominating, Obliging means accommodating the needs of only one party while ignoring the wishes of the other. Organizational goals may thus not be attained, at least not in interteam conflict situations with a mixed-motive character. This finding is an interesting extension of previous work on the benefits of shared identity effects. To reiterate, recategorization emphasizes the utility of the higher-order organizational commitment for functional interteam relations (i.e. members with a strong OC will collaborate *despite* a strong TC). Our findings suggest that a strong OC without a strong TC may also jeopardize the achievement of organizational goals because of a pronounced tendency among employees to oblige. In fact, we found a low TC to reinforce the positive effect of OC on Obliging. In this sense, a strong TC is a "must-have" to make employees more integrating (*given* a strong OC) and less obliging (*despite* a strong OC) in interteam conflict situations. This finding has important practical implications that will be discussed further below. However, it must be noted that the interaction only showed in the vignette experiment. Failure to replicate the interaction in the survey study might have been due to the poor reliability of the Obliging subscale ($\alpha = .69$). At the same time, a more substantive explanation is also conceivable. Since it is not unusual for military teams to prescribe self-sacrificial and pro-social behavior as important group norms, a strong team commitment might be consistent with deferring to the other team's wishes even if this means considerable losses for one's own team. In this case, the hypothesized interaction would not show. We will discuss this point below as a potential avenue for future research.

The results for Avoiding re-affirm the benefits of dual commitment. Being strongly attached to the organization and to the team at the same time make it highly unlikely for employees to withdraw from a conflict and leave its outcomes to chance. Apparently, as an affect-driven motivation to act, commitment makes individuals choose active responses to conflict. While this conclusion seems safe to draw, our results for the hypothesized interaction were somewhat less consistent. While the vignette study confirmed our prediction that TC would have a stronger effect on Avoiding when OC is low (compensatory effect), the survey findings suggested that the effects of the two commitments are additive. This discrepancy might be explained by the exclusive focus of our vignette study on concrete conflict situations where Avoiding was likely to result in considerable losses for all three parties involved (i.e. own team, other team, and the organization). Consequently, either a high TC or a high OC were sufficient to make Avoiding an unacceptable conflict strategy. By contrast, survey participants were introduced to a more general definition of interteam conflict, and might have imagined situations where only some but not all parties involved would have to bear the negative consequences of Avoiding. For example, if the imagined conflict issue was considered important for the own team but trivial for the other, a strong TC would have a strong negative effect on Avoiding that would not be compensated if only OC was high. The effects would then only be additive.

In summary, our results converge in suggesting that a dual commitment holds the greatest benefit for the management of interteam conflict in the organization. Compared with other commitment patterns, it reduces the likelihood of Dominating, Obliging, and Avoiding, while increasing the likelihood of Integrating. Confidence in the suggested causal directions is increased by our use of an experimental research design. Most of what is known about commitment and identification in organizations is based on correlational analysis of survey data and is subject to all the limitations of such designs. By contrast, we directly manipulated team and organizational commitment in vignettes, and evaluated their impact on measures of interteam conflict management. Interdependencies between individuals' TC, OC, and their conflict handling approaches could thus be experimentally disentangled. External validity was enhanced by an additional survey study whose results supported most of the vignette findings.

4.9 Limitations

Several issues in our study may give rise to criticism and warrant attention. First, and perhaps most importantly, our focus was on employees' strategy *preferences* rather than actual behavior. When discussing the importance of strategy preferences, we have pointed out that individuals often use a mix of different behaviors (e.g., they may dominate at first and become more collaborative later) to effectively implement their preferred strategy (e.g. Integrating). However, this does not mean that preferences and their related commitment patterns may not also change during a conflict. Against this backdrop, it may be worth examining how team and organizational commitment patterns affect, and are affected by, both strategy preferences and the action-reaction interplay between the conflict parties. We suggest ways of how this may be done in the theoretical implications section below.

From a methodological point of view, the question arises as to whether participants could immerse themselves in the conflict vignettes well enough to respond in accordance with their actual behavior. Moreover, doubts may be cast over whether affective states such as commitment can be successfully manipulated based on hypothetical scenarios. There are several reasons to suggest, however, that our manipulations were effective and that our results reflect choices that might have also been made in real life. First, our research context (i.e. the military) often involves decisions that must be made based on paper documentation or oral reports. Pretest findings confirmed that the scenarios were perceived as realistic and that no option was considered implausible. The vignettes were constructed from practitioner knowledge, and care was taken to provide sufficient information to adequately reflect the complexities of real-world decision making. Furthermore, as for the effectiveness of our commitment manipulations, social categorization theory and the minimal group experiments conducted by Tajfel and others (Tajfel, 1970; Tajfel, Billig, Bundy, & Flament, 1971) have repeatedly shown that the mere perceptual act of group categorization involving no face-to-face contact is enough to induce a group differentiation process. Our experimental setting not only categorized participants based on a given group membership (i.e. team and organization), it also explicitly evoked the affective states associated with that membership. Most importantly, however, the vignette findings were cross-validated by survey data gathered from an independent sample of respondents. Although common source bias cannot be ruled out as

all our data came from the same participants, the survey results lend confidence to the validity of our study approach. Taken together, the survey and the vignette experiment strengthen the internal and external validity of our research results.

The next issue that warrants attention is level of analysis. While we examined conflict handling at the individual level (i.e. in terms of individuals' preferences for different interteam conflict strategies), it may be argued that interteam conflict is inherently a group-level phenomenon. We offer two interconnected justifications for choosing the individual level. First, the vignette experiment showed that individuals reading the same vignette came out with the same preferences, thus indicating that team members faced with conflict situations and having TC and OC as in the vignettes have consensus about how to proceed. Individuals' strategy preferences may thus be a good prediction of how the group as a whole will respond. Furthermore, interteam conflict does not imply that all members of one team are in conflict with all members of the other team. Rather, conflict strategies are typically carried out by individuals that act as team representatives (Callister & Wall, 2001). The fact that there may be consensus within the team of how to proceed should make it easier for these representatives to enact a specific strategy because there is likely to be less resistance from within the team. Individual perceptions and intrateam consensus are thus important aspects of our research that required an individual level focus.

A final point to be considered is the transferability of our results to other organizational contexts. Conducting research in the military gave us the opportunity to test our hypotheses based on a wide variety of interteam conflicts, including those that entail serious repercussions. It must be noted, however, that commitment to one's team versus to the military and to the nation one serves as a function of being in the military may be very distinctive from other organizational experiences. Our results may thus apply only to organizations that, like the military, involve a strong element of service to the nation and a sense of camaraderie and cohesion as distinctive features of their organizational cultures (e.g. police force, fire departments). That said, important developments in the German and other militaries such as the shift to an all-volunteer force, the use of highly complex technology, and increasing work specialization have led many observers to note a growing trend of "civilianization" of the armed forces. This trend is characterized by a strong influence of

civilian values and a transference of civilian management techniques. Changes include, for example, a high integration of civilian experts at the unit level, the development of more family-friendly policies, the possibility to do internships and to quit service even during basic training, an increased participation of women, and civilian job education as part of soldiers' formal training. It may thus be argued that our results have relevance for organizations other than the military. Ultimately, of course, our hypotheses need to be tested using non-military samples to verify if they generalize to broader populations of employees. When doing so, researchers might also consider using alternative ways of measuring interteam conflict handling (De Dreu, Evers, Beersma, Kluwer, & Nauta, 2001).

4.10 Theoretical Implications and Future Research Directions

Much previous commitment research has been concerned with identifying the differential effects of team and organizational commitment on various workplace outcomes. The general finding is that both commitments are beneficial - one sometimes more than the other depending on the desired outcome. Given the growing use of teams in organizations, the importance of team commitment relative to organizational commitment seems to have grown. With regard to interteam conflict, however, our study has shown that a unilateral commitment to either the team or the organization may present a risk for the organization and effective interteam relations. Apparently, the two commitments are interrelated, and it seems necessary to look at their combined and interactive influence before any safe conclusion about the potential benefits of either commitment can be drawn. This point should be acknowledged prior to assessing the benefits of a single commitment and recommending its promotion based on findings from differential effects research.

Our study examined a wide range of conflict situations as they occur between organizationally nested teams. An important aspect of our research was the integration of the social dilemma character of interteam conflict into our research design and theorizing. Accordingly, we looked at teams that were roughly equivalent in terms of hierarchical level and contribution to overall goals. Our results clearly underlined the benefits of dual commitment, and we could reject the notion, made by ingroup projection theorists, that dual commitment per se produces negative effects when the groups are fully nested. This does not mean, however, that dual commitment will always affect interteam conflicts positively. When there are great power or

prestige differentials between the conflicting groups (e.g. management versus rank-and-file), the more powerful or more prestigious group may consider its interests more legitimate for the organization and thus be more dominating and intransigent in its conflict handling. Future research should therefore investigate situations where the conflicting groups differ to a greater degree in their power, status, or overall contribution.

More attention should also be paid to the content of the commitment targets. As we speculated in our discussion, specific ingroup norms may act as important moderators between employee commitment and conflict strategies. Team cultures that are marked by altruism, openness and self-sacrifice may reduce the tendency to dominate and increase the willingness to oblige among members with a high team commitment even if this means considerable loss for one's own team. Future research should investigate this possibility. In terms of commitment strength, our focus was on strong versus weak levels of team and organizational commitment. While a (strong) dual commitment has been shown to promote Integrating, it may be that moderate levels of one commitment may already suffice for Integrating to occur if the other commitment is already high. Also, moderate levels of both commitments may be more likely to result in Compromising, a strategy which we have not included in our analysis.

Finally, with regard to our dependent variables, our study has focussed on conflict management strategies as these have been shown to be better predictors of conflict outcomes than conflict states (i.e. employees' emerged perceptions of the nature and intensity of the conflict). However, research suggests that states and strategies jointly operate to influence performance outcomes (Behfar, Peterson, Mannix, & Trochim, 2008; DeChurch et al., 2013). While strategies seem to be more relevant for present performance such as getting the task done, members' perceptions of conflict states shape their satisfaction with the conflict and thus their capacity to continue to work together in the future. More may thus be learnt by adopting a process perspective in which the impact of employee commitment on both conflict states and conflict strategies is examined simultaneously. We speculate that employees with a dual commitment may not only be more likely to adopt an Integrating strategy but also perceive the intensity or gravity of the conflict as less severe. Future research that investigates this proposition will ideally use a longitudinal design to cover the entire conflict process from

underlying motivations (i.e. team and organizational commitment patterns), via employees' perceptions of differences, preferences for conflict strategies, conflict behavior and the action-reaction interplay between the conflict parties, to conflict performance outcomes, and back again to motivations. When examining the transition from preferences to conflict behavior, this research should also consider that the other party's behavior feeds back into, and possibly changes, strategy preferences and their related commitment patterns. Adopting a negotiation/communication-oriented perspective may be particularly helpful in this regard as it focuses on interactions and may also accommodate power and status differentials between the conflicting parties (e.g. Brett, Shapiro, & Lytle, 1998). Overall, we recommend a conceptualization of interteam conflict as an interactive process that both shapes and is shaped by, among others, employees' team and organizational commitment patterns.

4.11 Practical Implications

Given the role of dual commitment in fostering collaboration across teams, the question arises as to what organizations can do to promote such a bond. Perhaps one of the most important levers is leadership, especially that which is displayed by team leaders. The commitment and identification literature is replete with evidence highlighting the role of leadership in forming employees' attitudes and behavior toward organizationally relevant entities (Franke & Felfe, 2011; Meyer et al., 2002). In particular, transformational leadership (Avolio, 1999; Bass & Riggio, 2006) has been shown to have a profound impact on followers' commitment in a variety of settings and cultures (Avolio, Zhu, Koh, & Bhatia, 2004; Pillai & Williams, 2004; Ross & Gray, 2006; Walumbwa, Orwa, Wang, & Lawler, 2005). According to this theory, transformational leaders transform the needs, values and motivations of followers from self-interests to collective interests through their verbal and symbolic behavior (Shamir, House, & Arthur, 1993).

Although measures of transformational leadership do not clearly specify the beneficiary of charismatic behavior, there seems to be an implicit consensus that it is the organization's identity that must be made salient and the organization's values that must be exemplified. Underlying this view is the assumption that the organization and the teams and workgroups within it converge in their identities, values, and goals.

Organizations are not undifferentiated wholes, however, and our analysis of interteam conflict suggests that there might be different or even opposing values and goals operating dynamically within a single organization. Emphasizing what makes the organization unique may thus not suffice for the creation of a dual commitment. (Shamir, Zakay, Breinin, & Popper, 1998) have suggested that transformational leadership in organizations, at least involving managers who are not at the top level, should not be conceived of as disconnected from the organizational structure within which it is embedded. We subscribe to this view and suggest that the creation of a dual commitment to both the organization and the team necessitates a differential portrayal of transformational leadership as a function of these foci.

To emphasize what makes their team distinct from the rest of the organization, leaders may promote the use of special slogans, nicknames, logos, rituals, or other symbols relevant to the team. Furthermore, the leader should stand up for the group when the group is under attack or unduly criticized from outside. To avoid such behavior's creating an isolationist team attachment, however, the leader must also emphasize the organization's collective identity. This may be achieved by, among other things, raising followers' awareness of the interdependencies that exist within the organization; highlighting the organization's distinctive features in terms of products, tradition, and performance; attributing negative developments to external sources; using the pronouns "we" and "us" rather than "they" and "them" when talking about members of other organizational groups; and encouraging participation in organization-wide social events (Ashforth & Johnson, 2001). Followers that are thus led to combine their TC and OC into a perception of dual commitment may be more successful in performing their roles as team players both within their team and across teams in the organization.

If the proposed distinction of foci in transformational leadership is worth making, more specific measures of transformational leadership should result in better predictions of employee commitment to different entities, and should perhaps also improve predictions of other organizationally relevant outcomes. Against this backdrop, it may equally be worth asking how transformational leaders manage to balance team and organizational values and goals when these are perceived as incompatible. If the team and the organization are viewed

as opposed to one another, it may be highly unlikely that people will develop a strong dual attachment, even if they are primed to perceive both intergroup unity and differentiation.

5 Effects of the Interplay of Team and Organizational Commitment on Employee Effectiveness

5.1 Introduction

After examining the impact of different team and organizational commitment constellations on employees' interteam conflict handling, this chapter extends the analysis to other relevant workplace outcomes. More specifically, we will investigate additive and interactive effects of team and organizational commitment on employees' **team- and organization-directed citizenship behaviors** (i.e. discretionary behaviors beneficial to the team or the organization that go beyond formal job requirements; see Dennis W. Organ, 1988; Dennis W. Organ, Podsakoff, & MacKenzie, 2006); **efficacy beliefs** (i.e. the belief in the abilities of the team or the organization to perform its tasks and achieve its goals; see Bandura, 1986, 1997), and **turnover intentions** (i.e. intentions to leave the team or the organization). As will be shown, the distinction in terms of team- and organization-directed outcome components is worth making because employees sufficiently discriminate between them and may display high levels on one component but not the other. Consequently, additive and interactive effects of team and organizational commitment may work in one or both directions. Our main proposition is that employees with a dual commitment (i.e. high team and high organizational commitment) will score highest on all outcome variables than employees with other commitment constellations (i.e. unilateral commitment to the team or the organization, or non-commitment).

Commitment researchers have long recognized that employees can feel committed to more than one target at a time, and that multiple commitments can operate simultaneously in organizational settings (Becker, 1992; Bishop & Scott, 2000; Felfe, Schmook, Schyns, & Six, 2008; Reichers, 1986). In an attempt to determine the differential effects of multiple commitments on workplace outcomes, existing multi-foci research has shown that the strongest relationships exist if the commitment and the outcome variable are directed at the same target. They thus seem to follow the "target similarity principle" (Lavelle, Rupp, & Brockner, 2007) or "compatibility hypothesis" (Snape, Chan, & Redman, 2006). For instance, team commitment has been found to be more strongly related to team performance and

helping behavior toward other team members, whereas organizational commitment is more strongly related to organizational turnover or compliance with organizational rules and procedures (Chan, Tong-qing, Redman, & Snape, 2006; Lavelle, Konovsky, & Brockner, 2005; Riketta & van Dick, 2005). Based on the target similarity principle, it has been suggested that commitment to one target should be sufficient to predict outcomes directed at the same target, while commitments to additional, non-matching targets should be largely redundant (Lavelle et al., 2009; Snape et al., 2006). If interactions occur at all, they should be compensatory in nature (i.e. the non-matching commitment may partially compensate low levels of the matching commitment). With regard to team and organizational commitment, however, results regarding this redundancy are mixed. While some researchers have found no evidence of additive cross-over effects (Lavelle et al., 2009), van Dick et al. (2008) have suggested that team and organizational commitment should interact with each other to enhance their positive effects on employee performance outcomes. Drawing on consistency theory, these authors argued that a positive overlap between team and organizational attachment satisfies employees' fundamental desire to feel self-conceptually consistent about their workplace memberships, and thus results in them experiencing higher levels of motivation and involvement at work. So far, however, the proposed enhancement effect could only be confirmed for employee citizenship behavior in a survey study among bank and tourism employees, and a call for more research in different contexts and on other outcomes has been made to substantiate van Dick et al.'s (2008) findings. Furthermore, the existing evidence does not distinguish between different outcome components (i.e. team- and organization-directed citizenship behavior), thus leaving open the question if the proposed interaction works in one or both directions (i.e. team and organization). The aim of this study is to investigate this issue and examine the extent to which van Dick et al.'s findings extend to other relevant workplace outcomes. In fact, if satisfied needs for self-consistency lead to higher levels of employee well-being and involvement, it may be argued that interaction effects should also occur with regard to employees' team- and organization-directed turnover intentions and efficacy beliefs. We will examine this possibility and deduce specific hypotheses for these outcome variables based on van Dick's et al. (2008) theoretical reasoning. Our study thus contributes to an ongoing debate about the interplay of commitments to different foci in the workplace. The practical value of our study lies in the fact that it allows a more fine-grained analysis of the benefits of team and organizational

commitment for organizations. For instance, if organizational commitment predicts team performance beyond team commitment, and if the two commitments interact synergistically, team leaders may want to combine specific team-building measures with the promotion of overarching organizational values and goals to raise their subordinates' team performance.

Following a recommendation by Meyer, Stanley, and Vandenberg (2013), we will approach our study from both a "variable-centered" and a "person-centered" perspective. As these authors have pointed out, existing multi-foci research is limited because it is mostly based on a "variable-centered" approach. This approach is characterized by attempts to identify the relevant outcome variables of multiple commitments (to the team, organization, supervisor, profession, etc.) and explain as much variance in these outcomes as possible. The strength of this approach lies in its ability to detect additive and interactive effects, and thus qualify simple correlations that are often reported in meta-analytic studies. However, it does not take into account the existence of meaningful subgroups that may form based on combinations of high and low commitments to multiple targets (Morin, Morizot, Boudrias, & Madore, 2010). Meta-analytic evidence has shown that team and organizational commitment are often only moderately correlated and therefore distinct enough to allow for a considerable number of employees with unilateral commitments. In fact, there may even be situations in which the two commitments work against each other; for example, when team values collide with those of the organization and vice versa. The resulting commitment patterns (i.e. high-high; low-high; high-low; low-low) may have differential performance implications that are not necessarily captured by variable-centered approaches because these do not offer information about how different configurations of multiple commitments operate within individuals (Morin et al., 2010). Meyer et al. (2013) thus recommend the use of person-centered approaches in addition to variable-centered approaches, especially if individuals may face conflictual commitments to multiple targets. A person-centered approach partitions the sample in theoretically meaningful subgroups and examines differences between them with regard to the outcomes of interest (e.g. employee citizenship behavior).

In the following, we will define our outcome variables, highlight the nature of their relationship with employee commitment, and develop specific variable- and person-centered

hypotheses as to how the team- and organization-level components of these outcomes are affected by the interplay of team and organizational commitment.

5.2 Hypothesis Development

5.2.1 Organizational Citizenship Behavior

Organizational Citizenship Behavior (OCB) can be defined as discretionary behaviors that are not part of an employees' formal job role but nevertheless make a significant contribution to the effectiveness of an organization (Dennis W. Organ, 1988; Dennis W. Organ et al., 2006). The literature sometimes refers to these behaviors also as extra-role behaviors or contextual performance (Felfe, 2007). Furthermore, depending on the intended beneficiary of OCB, a distinction is made between OCBs directed toward the organization (OCBO) and toward individuals (OCBI) (i.e. team members and supervisors). An example of OCBO would be attending voluntary meetings or events pertaining to the organization, while an example of OCBI would be volunteering to help other team members (Lavelle et al., 2005; Williams & Anderson, 1991).

Meta-analytic evidence highlights the general importance of OCB for employers. OCB is positively related to productivity ($\rho = .37$), efficiency ($\rho = .40$), and customer satisfaction ($\rho = .23$) (Podsakoff, Whiting, Podsakoff, & Blume, 2009). Furthermore, it has a significant negative impact on costs ($\rho = -.52$). Employee commitment has been shown to be a crucial predictor of OCB (Cooper-Hakim & Viswesvaran, 2005; Meyer et al., 2002). The basic tenet is that citizenship behaviors are motivated by positive workplace attitudes such as job satisfaction and commitment. In particular, affective commitment indicates the existence of a high quality social exchange relationship with the employer that prompts the employee to engage in extra-role behaviors in reciprocation for received economic and socio-emotional benefits (Cropanzano & Mitchell, 2005).

More detailed analyses have applied the multi-foci perspective of commitment to make differential predictions of OCB in terms of OCBO and OCBI. In line with the target-similarity principle, it was found that OCBO was more strongly related to organizational commitment than to team commitment, whereas OCBI was more strongly related to team commitment than

to organizational commitment (Lavelle et al., 2009; Riketta & van Dick, 2005). As stated before, however, it is unclear whether the target-specific predictions of one commitment can be improved by inclusion of the other commitment. Lavelle et al. (2009) argued against an augmentation effect because the non-matching commitment is not the driving force for the focal actor to exhibit OCBO or OCBI. However, this argument ignores the nested nature of teams in organizations (i.e. the team and the organization form a means-end chain; see Ashforth and Johnson, 2001). On the hand, team members may display OCBO such as making suggestions to improve the organization because this may be useful for their team in terms of status, recognition and extra resources. Team commitment can thus be an additional source of motivation for exhibiting OCBO beyond one's overall organizational commitment.

H1a (*variable-centered approach*): Team commitment predicts organization-directed organizational behaviors (OCBO) over and above organizational commitment.

H1b (*person-centered approach*): Employees with a dual commitment display higher levels of organization-directed citizenship behavior (OCBO) than employees that are unilaterally committed to their organization.

On the other hand, commitment to the overarching entity may provide additional meaning and purpose for the display of OCBI (such as helping other team members) beyond the more immediate influence of positive team affect and attachment to lower-order team goals. As Ashforth and Johnson (2001) have pointed out, immersion in a higher-order identity and its mission allows one to become part of an edifying collective and experience feelings of empowerment. Such feelings should make an additional contribution to involvement at the local level (i.e. team) and thus encourage OCBI beyond team commitment. Therefore:

H2a (*variable-centered approach*): Organizational commitment predicts team-directed citizenship behavior (OCBI) over and above team commitment.

H2b (*person-centered approach*): Employees with a dual commitment display higher levels of team-directed citizenship behaviors (OCBI) than employees that are unilaterally committed to their team

Based on consistency theory, it may further be argued that team and organizational commitment mutually enhance each other in their target-specific effects on OCBI and OCBO. As van Dick et al. (2008) have pointed out with regard to consistency theory (Festinger, 1962; Heider, 1958), a positive overlap between team and organizational membership contributes to employees' needs to be consistent in their thoughts, feelings and affiliations, thus increase their motivation at work. Adding to this argument, optimal distinctiveness theory posits that individuals have fundamental but competing desires for assimilation with others and distinctiveness from others, for "being the same and different at the same time" (Brewer, 1996, p. 475). With regard to the workplace, these desires are reconciled if employees feel dually attached to their organization and their team because a strong organizational commitment will facilitate feelings of belongingness to a larger collective while a strong team commitment facilitates feelings of uniqueness and exclusiveness within that collective. The satisfaction of these needs should add to employees' involvement, and thus make the positive effect of one commitment on its focal outcome (OCBI or OCBO) more contingent on the levels of the other. Therefore:

H3: The positive relationship between organizational commitment and OCBO is more positive if team commitment is high than when it is low.

H4: The positive relationship between team commitment and OCBI is more positive if organizational commitment is high than when it is low.

5.2.2 Collective efficacy

Collective efficacy refers to future-oriented judgements about the capabilities of a group (i.e. organization or team) to organize and execute the courses of action required to produce given levels of attainment (Bandura, 1997, p. 477). The question is, can "we" (as a team or an organization) orchestrate the thoughts and actions necessary to complete our task and achieve our goals? Perceptions of collective efficacy have been shown to be a good predictor of group performance ($\rho = .41$) (Gully, Incalcaterra, Joshi, & Beaubien, 2002; Jordan, Feild, & Armenakis, 2002; Lindsley, Brass, & Thomas, 1995; Parker, 1994), and a buffer of the relationship between work stressors and strains (Jex & Bliese, 1999).

There are two approaches for explaining why employee commitment should increase collective efficacy beliefs. The first is based on cognitive process theory and argues that group efficacy is the product of how members process information about their group (e.g. about past performance) (Gibson & Earley, 2007). Affective states have a strong influence on what type of group information will be retained or dismissed, and this information will determine group efficacy perceptions (Lin, Lin, Huang, & Wang, 2014). Given that commitment signifies a strong positive affect toward the group, highly committed group members should have a greater inclination to process favorable information about their group and thus believe more strongly in their group's efficacy than lowly committed group members. The second explanation draws on social identity theory to argue that the more individuals feel affectively attached to a group, the more they want to perceive their group as efficacious because it reflects positively on their group's identity and thus themselves (Shamir, Brainin, Zakay, & Popper, 2000). Consequently, highly committed employees should have a greater inclination to evaluate their group in favorable terms.

Applying the multi-foci framework to employees' efficacy perceptions, it may be argued that team commitment has a positive effect on team efficacy beliefs, and organizational commitment has a positive effect on organizational efficacy beliefs. The distinction between the two foci seems worth making because employees may have confidence in the abilities of their team but not the organization and vice versa. However, given that the team is nested in the organization, team and organizational efficacy and performance are not completely independent. A team cannot fully perform its assigned goals without support from other teams and the organization as a whole, and other teams and the overall organization rely on own team support for task accomplishment. It may therefore be argued that organizational commitment adds to the positive effect of team commitment on team efficacy beliefs, and team commitment adds to the positive effect of organizational commitment on organizational efficacy beliefs.

H5a (*variable-centered approach*): Team commitment predicts organization-directed efficacy beliefs over and above organizational commitment.

H5b (*person-centered approach*): Employees with a dual commitment display higher levels of organization-directed efficacy beliefs than employees that are unilaterally committed to their organization.

H6a (*variable-centered approach*): Organizational commitment predicts team-directed efficacy beliefs over and above team commitment.

H6b (*person-centered approach*): Employees with a dual commitment display higher levels of team-directed efficacy beliefs than employees that are unilaterally committed to their team.

Furthermore, if the two commitments are perceived as compatible and consistent, they may reinforce each other to provide a more positive "frame of mind" for processing information about the team and the organization that goes beyond the sum of the parts. This enhanced positive affect should also result in higher team- and organization-directed efficacy perceptions. Therefore,

H7: The positive relationship between organizational commitment and organization-directed efficacy belief is more positive if team commitment is high than when it is low.

H8: The positive relationship between team commitment and team-oriented efficacy belief is more positive if organizational commitment is high than when it is low.

5.2.3 Turnover intentions

Turnover intentions can be defined as the intensity of an individual's desire to leave his or her organization or team. Research has shown that organizational turnover is a considerable cost factor for organizations, especially if it occurs among highly performing employees that are difficult to replace. Meta-analytical evidence suggests a significant negative relationship between voluntary turnover and the financial performance of organizations ($\rho = -.15$) (T.-Y. Park & Shaw, 2013). As numerous studies have demonstrated, committed employees are less likely to leave their organization, especially if they are affectively committed (Cohen, 1993; Meyer et al., 2002). This is because affective commitment is based on the congruence between individuals' own values and goals and those of the organization. The attachment thus

involves a genuine wish to stay rather than a felt obligation based on instrumental reasons (i.e. continuance commitment) or moral obligations (i.e. normative commitment).

As with organizational citizenship behavior, it may be argued that turnover intentions have an organization-level and a team-level component. The distinction seems worth making especially for highly differentiated organizations that involve distinct team cultures. For example, expatriate managers may wish to quit their assignment to a foreign operation because of difficulties to adapt to the local culture (Nguyen et al., 2015). However, they may be generally satisfied with the overall organization and desire to remain a part of it. Conversely, employees may be emotionally attached to other members of their team and thus experience a strong desire to maintain their team membership. Due to a lack of organizational support or an insufficient work infrastructure, however, their intentions to stay with the organization may be considerably less pronounced. Hence, although the two turnover foci are correlated, they may be sufficiently distinct to allow separate analyses.

So far, research has focused on the relationship between organizational commitment and organizational turnover (see above). Team level effects (e.g. "Is team commitment a better predictor of team turnover intentions than organizational commitment?") as well as cross-level effects (e.g. "Can team commitment predict organizational turnover over and above organizational commitment?") have not been examined. According to the target similarity principle, team commitment should be the better predictor of team turnover intentions, whereas organizational commitment should be the better predictor of organizational turnover intentions. Furthermore, considering the nested nature of team and organizational membership, incremental improvements in target-specific predictions by one commitment over the other seem also likely. On the one hand, a positive affect toward one's team nurtured by one's team commitment may be a decisive factor for employees' desire to remain with the overall organization. On the other hand, team turnover intentions may contain organization-specific elements that vary with their organizational commitment (e.g. office infrastructure, relationship with other teams, etc.). We therefore hypothesize:

H9a (*variable-centered approach*): Team commitment predicts organization-directed turnover intentions over and above organizational commitment.

H9b (*person-centered approach*): Employees with a dual commitment display lower levels of organization-directed turnover intentions than employees that are unilaterally committed to their organization.

H10a (*variable-centered approach*): Organizational commitment predicts team-directed turnover intentions over and above team commitment.

H10b (*person-centered approach*): Employees with a dual commitment display lower levels of team-directed turnover intentions than employees that are unilaterally committed to their team.

The more the two commitments are aligned and positive, the more employees should feel self-conceptually consistent about their team and organizational membership, and be able to satisfy needs for consistency and optimal distinctiveness. Higher levels of one commitment should thus reinforce the other in reducing target-specific turnover intentions.

H11: The negative relationship between organizational commitment and organization-directed turnover intentions is more negative if team commitment is high than when it is low.

H12: The negative relationship between team commitment and team-directed turnover intentions is more negative if organizational commitment is high than when it is low.

5.3 Study 3

To test our hypotheses, we conducted a survey study among service members of the German military. The military was considered an appropriate setting because it is sufficiently large and differentiated to allow distinct team cultures to thrive within the overall organization (e.g., ship crew, IT specialists, administrators, members of elite combat units, etc.). As will be shown, participants clearly distinguished between their team- and organization-directed commitments, citizenship behaviors, efficacy beliefs, and turnover intentions. We will briefly describe how we measured these variables, and then present our sample, analytical strategy, and results.

5.3.1 Sample and procedure

The adoption of a person-centered approach (commitment profiles) required the partitioning of employees into clearly identifiable and distinct team and organizational commitment subgroups (i.e. low-low, high-low, low-high, high-high). To ensure sufficiently large cell sizes and enough sample power, we invited more than 5'000 members from all service branches of the German military (navy, army, air force) to participate in the survey. Participation was voluntary and participants were assured that their data would be treated confidentially. The survey was administered online and, where online access was not available, in a paper-and-pencil form. The final sample consisted of 1'362 respondents. 91% were male. The average age was 25.7 years ($SD = 5.1$ years). Team and organizational tenure were obtained in categorical classes (team tenure: less than 1 year: 32%, 1-4 years: 74%, 5 years or more: 26%; organizational tenure: less than 1 year: 17%, 1-4 years: 34%, 5 years or more: 49%).

5.3.2 Measures

Organizational and team commitment. Franke & Felfe's (2012) validated German translation of Allen and Meyer's (1990) Commitment Scale provided four items for the measurement of affective organizational commitment (example: "I feel a strong sense of belonging to this organization"), and three items for the measurement of affective team commitment (example: "I am proud to be part of this team"). Responses were recorded on a 5-point Likert scale, with higher scores indicating higher levels of commitment. Both scales showed high reliabilities (α for the OC scale = .81; α for the TC scale = .86).

Organization- and team-directed citizenship behaviors. Previous measures of OCBO and OCBI have been criticized for including items that do not clearly specify the intended beneficiary (McNeely & Meglino, 1994). We kept this issue in mind when choosing our items. To measure OCBI, we used a validated German version of the altruism subscale of OCB from Podsakoff, MacKenzie, Moorman, and Fetter (1990) (for the German version, see Felfe, Schmook, & Six, 2005). Three items of this measure tap into behavior intended to help one's team members and were thus retained (e.g. "I try to avoid creating problems for my team members"). The fourth item - "Additional tasks often become my responsibility" - was

discarded because the beneficiary may vary depending on the nature of the task. OCBO was measured with three items from the "civic virtue" subscale in which the organization was the clearly intended beneficiary of the behavior (e.g. "I try to keep abreast of developments in the organization, even if they do not relate to my immediate job tasks"). A five-point Likert scale response format was adopted. The reliabilities of both scales were acceptable (α for OCBO scale = .72; α for OCBI scale = .71).

Organization- and team-directed efficacy beliefs. To tap into participants' efficacy perceptions, we used four items for each component based on Chen and Bliese's (2002) collective efficacy scale for use in military settings. The items were translated into German using the parallel blind technique (Behling & Law, 2000). A sample item from the team-directed efficacy scale is: "I have real confidence my team's ability to achieve its tasks," and a sample item from the organization-directed efficacy scale is: "The organization is absolutely capable of performing its mission." Answers were recorded on a 5-point response format. Both scales were highly reliable (α for the team-level efficacy scale = .86; α for the organization-level efficacy scale = .88).

Organization- and team-directed turnover intentions. Single-item measures were used to collect data on participants' intention to leave the organization ("If I could, I would leave the organization immediately") and their team ("If I could, I would leave the team immediately"). These measures are similar to other single-item turnover measures used in the literature (Camp, 1994; Mathieu & Zajac, 1990)

Control variables. Because past research suggests that gender, age and tenure are significantly related to citizenship behaviors (D. W. Organ & Ryan, 1995), efficacy beliefs (G. Chen & Bliese, 2002), and turnover intentions (Griffeth, Hom, & Gaertner, 2000), we controlled for these variables in all our analyses.

5.3.3 Analytical strategy

We first conducted confirmatory factor analyses to demonstrate that commitment, citizenship behavior, and collective efficacy perceptions were distinguishable at the team and the organizational level. With regard to the single-item measurements of team- and organization-directed turnover intentions, a correlation of $r = .28$ ($p < .01$) suggested that participants

sufficiently discriminated between the two components. The subsequent testing of our hypotheses from both a variable-centered and a person-centered perspective required the application of two data analysis strategies, namely multiple regression (variable-centered approach) and analysis of covariance (person-centered approach). We began with multiple regressions to test the proposed additive and interactive effects of team and organizational commitment. Each outcome variable (i.e. team- and organization-level citizenship behaviors, efficacy beliefs, and turnover intentions) was hierarchically regressed on four blocks of predictor variables. The controls were entered in the first block (model 1), followed by the commitment that matched the outcome according to the target similarity principle (model 2). We then added the non-matching commitment to assess the extent of additive cross-over effects (model 3). Finally, we included the two-way interaction (TC x OC) to verify the hypothesized enhancement effects (model 4). A line graph was used to facilitate the interpretation of the interaction if it was found significant. In line with Aiken and West's (1991) guidelines, we plotted the simple slopes of the predictor (e.g. OC) at -1 SD and +1 SD from the mean of the moderator (e.g. TC). Both commitment scales were centred prior to regression to avoid issues of multicollinearity.

After the regression analysis we proceeded to test the person-centered hypotheses using a between-groups analysis of covariance (ANCOVA). A median split was applied to dichotomize team and organizational commitment and create four distinct commitment profiles, namely: 1) *dually committed* (high TC & high OC); 2) *unilaterally committed to the organization* (low TC & high OC); 3) *unilaterally committed to the team* (high TC & low OC); and 4) *uncommitted* (low TC & low OC). Median splits have been applied in previous studies to categorize and compare individuals in terms of different commitment patterns (Carson, Carson, Roe, Birkenmeier, & Phillips, 1999; Somers & Birnbaum, 2000). However, given that this technique can result in misleading category labels (i.e. high vs. low), we compared team and organizational commitment both within and between the four patterns to check if the differences were systematic and meaningful. First, t-tests were used to examine if team and organizational commitment were sufficiently distinct within the unilaterally committed groups, and the same within the dually committed and the non-committed groups. We then conducted an analysis of variance (ANOVA) to check if the differences were also meaningful between the groups. For example, we compared the dually committed group to

those with a unilateral organizational commitment in order to check if and to what extent the former scored higher on team commitment but not on organizational commitment than the latter. Following this procedure, we compared the four profile groups on the outcome variables using analysis of covariance (ANCOVA). Preliminary checks were run to ensure that there was no violation of the assumptions of normality, homogeneity of regression slopes, and homogeneity of variances.

5.3.4 Results

5.3.4.1 Testing assumptions about components: Confirmatory factor analysis

Goodness-of-fit indices were calculated and compared for one- and two-factor solutions of commitment, citizenship behavior and collective efficacy perceptions. As shown in table 8, the two-factor solutions with the team- and the organization-level component as separate factors reproduced the data significantly better than the one-factor solutions with the two components collapsed. Furthermore, the components were only moderately correlated (see Table 7). Correlation coefficients of $r = .32$ ($p < .01$) for commitment, $r = .44$ ($p < .01$) for citizenship behavior, and $r = .33$ ($p < .01$) for efficacy beliefs suggest that participants sufficiently differentiated between the team- and organization-level outcome components.

Table 8: *Fit Indices for One- and Two-Factor Models of Commitment, Citizenship Behavior, and Collective Efficacy Beliefs*

| Fit indices | Commitment | | Citizenship Behavior | | Efficacy Beliefs | |
|----------------------|------------|----------|----------------------|----------|------------------|----------|
| | 1-factor | 2-factor | 1-factor | 2-factor | 1-factor | 2-factor |
| Chi-squared | 1392.9 | 47.1 | 140.17 | 38.4 | 1782.0 | 32.3 |
| df | 14 | 13 | 6 | 5 | 9 | 8 |
| p-value | .00 | .00 | .00 | .00 | .00 | .00 |
| Δ Chi-squared | | 1345.8 | | 101.7 | | 1749.7 |
| Δ df | | 1 | | 1 | | 1 |
| Δ p-value | | .00 | | .00 | | .00 |
| GFI | .701 | .989 | .954 | .987 | .666 | .992 |
| AGFI | .402 | .977 | .863 | .953 | .222 | .978 |
| RMSEA | .280 | .046 | .148 | .084 | .392 | .048 |
| BIC | 1492.74 | 77.04 | 160.27 | 116.69 | 187.87 | 125.23 |

5.3.4.2 Testing assumptions about commitment profiles: Analysis of variance

In preparation for our person-centered analyses, median splits were performed on team and organizational commitment to create the different commitment profiles, namely: 1) dually committed (DC); 2) unilaterally committed to the organization (UC-O); 3) unilaterally committed to the team (UC-T); and 4) non-committed (NC). Cut-points were $Mdn = 3.0$ for team commitment and $Mdn = 3.7$ for organizational commitment (based on the original scale values from 1 to 5). The factorial combination of the two commitments resulted in sufficiently large cell sizes for each commitment profile, namely 331 (25.1%) for the DC group, 252 (19.1%) for the UC-O group, 270 (20.6%) for the UC-T group, and 464 (35.2%) for the NC group. To check whether the four profiles were systematically and meaningfully distinct, we conducted a between-groups analysis of variance with planned comparisons. The dually committed group was compared to each of the remaining groups in terms of their team and organizational commitment. For the profile labels to be consistent, we expected that:

1. DCs score higher than NCs on both team and organizational commitment
2. DCs score higher than UCOs on team commitment but not on organizational commitment
3. DCs score higher than UCTs on organizational commitment but not on team commitment

The ANOVA results are shown in table 4 below. Overall, there were statistically significant differences between the DC group and the remaining groups with regard to both team commitment, $F(3, 1313) = 878.7, p < .01$, and organizational commitment, $F(3, 1313) = 829.1, p < .01$. In line with our expectations, the DC group ($M = 3.91, SD = 0.48$) had higher team commitment than the NC group ($M = 2.29, SD = 0.60$) and the UC-O group ($M = 2.42, SD = 0.59$), but not than the UC-T group ($M = 3.85, SD = 0.47$). Furthermore, the DC group had higher organizational commitment ($M = 4.48, SD = 0.36$) than the NC group ($M = 2.88, SD = 0.69$) and the UC-T group ($M = 3.23, SD = 0.53$), but not than the UC-O group ($M = 4.43, SD = 0.38$). The observed differences were thus in the expected directions and very large, as indicated by their respective effect sizes. We thus proceeded to test our hypotheses using ANCOVA.

Table 9: *Analysis of Variance With Planned Comparisons and Team and Organizational Commitment as Dependent Variables*

| Dependent Variables with Planned Contrasts | Mean Difference | <i>t</i> | <i>df</i> | η | <i>p</i> |
|--|-----------------|----------|-----------|--------|----------|
| Team Commitment | | | | | |
| DC vs. NC | 1.62** | 41.28 | 784.8 | .68 | .00 |
| DC vs. UC-O | 1.48** | 32.47 | 471.9 | .64 | .00 |
| DC vs. UC-T | .05 | 1.29 | 582.3 | .00 | .13 |
| Organizational Commitment | | | | | |
| DC vs. NC | 1.60** | 42.70 | 737.4 | .70 | .00 |
| DC vs. UC-O | .04 | 1.57 | 527.0 | .00 | .12 |
| DC vs. UC-T | 1.25** | 32.98 | 459.3 | .64 | .00 |

Note. The contrast values represent differences in means based on the original scale interval from 1 to 5, with higher scores indicating a higher level of commitment. Abbreviations: DC = Dual commitment; UC-O = Unilateral commitment to the organization; UC-T = Unilateral commitment to the team; NC = Non-commitment
 * $p < .05$, ** $p < .01$

5.3.4.3 Variable-centered analysis based on multiple regression

For a better overview, the regression results are displayed in two tables. Tables 7 shows the results for the organization-level outcomes, and Table 8 shows the results for the team-level outcomes. Pre-analysis screening of residual scatterplots showed no serious violations of normality, linearity and homoscedasticity assumptions. Variance inflation factors ranged from 0.702 to 1.416 across the analyses, indicating the absence of multicollinearity among the predictor variables. A total of 34 cases were identified through Malahanobis distance as multivariate outliers ($p < .001$) and removed from all analyses.

Table 10: Regression Results for Organization-Directed Citizenship Behaviors, Efficacy Beliefs, and Turnover Intentions

| Variables | A) Organization-directed citizenship behavior | | | | B) Organization-directed efficacy beliefs | | | | C) Organization-directed Turnover Intention | | | |
|------------------------------|---|---------|--------|--------|---|---------|---------|--------|---|---------|---------|---------|
| | 1a | 2a | 3a | 4a | 1b | 2b | 3b | 4b | 1c | 2c | 3c | 4c |
| Block 1: Controls | | | | | | | | | | | | |
| Gender | | | | | | | | | | | | |
| Male (ref.) | | | | | | | | | | | | |
| Female | -.04 | -.05 | -.04 | -.04 | .03 | .02 | .02 | .02 | -.07* | -.06* | -.06* | -.06* |
| Organizational tenure | | | | | | | | | | | | |
| 1 - 4 years (ref.) | | | | | | | | | | | | |
| 5 years or more | .25** | .22** | .23** | .23** | -.08* | -.15** | -.14** | -.13** | .04 | .11** | .11** | .11** |
| Team tenure | | | | | | | | | | | | |
| 1 - 4 years (ref.) | | | | | | | | | | | | |
| 5 years or more | .08** | .08** | .07* | .07* | .02 | .01 | .00 | .01 | -.01 | .01 | .01 | .01 |
| Block 2: Main effect OC | | | | | | | | | | | | |
| Organizational commitment | | .26** | .23** | .24** | | .53** | .52** | .50** | | -.63** | -.61** | -.59** |
| Block 3: Main effect TC | | | | | | | | | | | | |
| Team commitment | | | .11** | .10** | | .03 | .03 | .03 | | | -.07** | -.08** |
| Block 4: Two-way interaction | | | | | | | | | | | | |
| TC x OC | | | | .07** | | | | -.08** | | | | .06** |
| ΔR^2 | | .05 | .01 | .01 | | .28 | .00 | .01 | | .40 | .00 | .00 |
| F for ΔR^2 | | 101.6** | 17.6** | 7.2** | | 498.4** | 1.6 | 11.0** | | 820.2** | 9.3** | 6.9** |
| R^2 | .10 | .16 | .17 | .18 | .01 | .28 | .28 | .29 | .01* | .39 | .40 | .40 |
| F for R^2 | 46.1** | 62.7** | 54.3** | 46.7** | 2.9* | 127.7** | 102.5** | 87.9** | 2.6 | 208.2** | 169.5** | 143.0** |

Note. Standardized regression coefficients are shown. Changes in R^2 are from the immediately preceding block.

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

Table 11: Regression Results for Team-Directed Citizenship Behaviors, Efficacy Beliefs, and Turnover Intentions

| Variables | D) Team-directed citizenship behavior | | | | E) Team-directed efficacy beliefs | | | | F) Team-directed Turnover Intention | | | |
|------------------------------|---------------------------------------|--------|--------|--------|-----------------------------------|---------|---------|---------|-------------------------------------|---------|---------|---------|
| | 1d | 2d | 3d | 4d | 1e | 2e | 3e | 4e | 1f | 2f | 3f | 4f |
| Block 1: Controls | | | | | | | | | | | | |
| Gender | | | | | | | | | | | | |
| Male (ref.) | | | | | | | | | | | | |
| Female | -.04 | -.04 | -.04 | -.04 | .01 | .01 | .01 | .01 | -.01 | -.01 | .00 | -.01 |
| Organizational tenure | | | | | | | | | | | | |
| 1 - 4 years (ref.) | | | | | | | | | | | | |
| 5 years or more | .31** | .32** | .30** | .30** | -.02 | .01 | -.01 | -.01 | .01 | -.02 | -.01 | -.01 |
| Team tenure | | | | | | | | | | | | |
| 1 - 4 years (ref.) | | | | | | | | | | | | |
| 5 years or more | .06* | .03 | .03 | .03 | .01 | -.06* | -.06* | -.06* | -.06 | .01 | .01 | .01 |
| Block 2: Main effect TC | | | | | | | | | | | | |
| Team commitment | .22** | .18** | .17** | .17** | .59** | .56** | .56** | .56** | -.58** | -.57** | -.57** | -.57** |
| Block 3: Main effect OC | | | | | | | | | | | | |
| Organizational commitment | .12** | .12** | .14** | .14** | .09** | .09** | .09** | .09** | -.02 | -.02 | -.02 | -.02 |
| Block 4: Two-way interaction | | | | | | | | | | | | |
| TC x OC | | | | .07** | | | | -.03 | | | | -.02 |
| ΔR^2 | .05 | .01 | .01 | .01 | .34 | .01 | .00 | .00 | .34 | .00 | .00 | .00 |
| F for ΔR^2 | 73.4** | 21.5** | 7.7** | 7.7** | 680.1** | 14.3** | 1.2 | 1.2 | 645.7** | 0.5 | 0.5 | 1.1 |
| R^2 | .12 | .17 | .18 | .19 | .00 | .34 | .35 | .35 | .00 | .34 | .34 | .34 |
| F for R^2 | 57.9** | 64.3** | 56.5** | 48.6** | .1 | 170.2** | 140.4** | 117.2** | 1.4 | 163.0** | 130.4** | 108.9** |

Note. Standardized regression coefficients are shown. Changes in R^2 are from the immediately preceding block.

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

Regression results for organization-directed citizenship behavior (OCBO). Table 2 shows the regression results for OCBO (models 1a to 4a). Our prediction that TC explains additional variance in OCBO when controlling for OC was confirmed (R^2 -change = .01; $p < .01$; see model 3a). Furthermore, the interaction between the two commitments was significant and indicated a synergistic moderation ($\beta = .07$, $p < .01$; see model 4d in conjunction with Figure 1 below). The full regression model (model 4d) accounted for 17.5% of the variance in the outcome variable. 7.7% of this variance was attributable to team and organizational commitment and 0.5% to the TC x OC interaction. Hypotheses H1a and H3 were thus both confirmed.

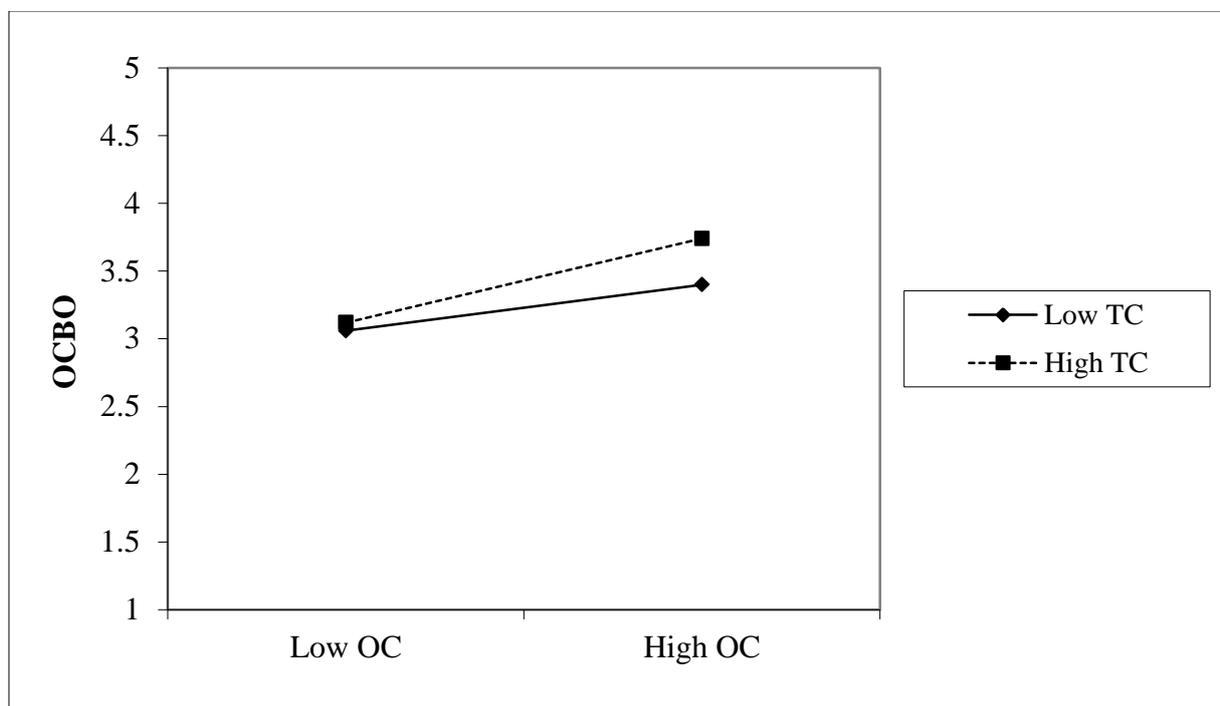


Figure 10: Team commitment as a moderator of the relationship between organizational commitment and organization-directed citizenship behavior

Regression results for team-directed citizenship behavior (OCBI). The regression results for OCBI are shown in Table 3 (models 1d - 4d). As expected (H2a), organizational commitment adds to the prediction of OCBI over and above team commitment (R^2 -change = .01; $p < .01$; see model 3d). Furthermore, the TC x OC interaction was significant ($\beta = .07$, $p < .01$), inducing an R^2 -change of one percent ($p < .01$; see model 4d). Figure 2 shows that the two commitments enhance each other in their positive effects on the outcome variable, as H4

suggested. The full regression model (model 4d) accounts for 18.5% of the variance in the outcome variable, with the main and interactive effects of TC and OC explaining a total of 6.6%. Hypotheses H2a and H4 were thus supported.

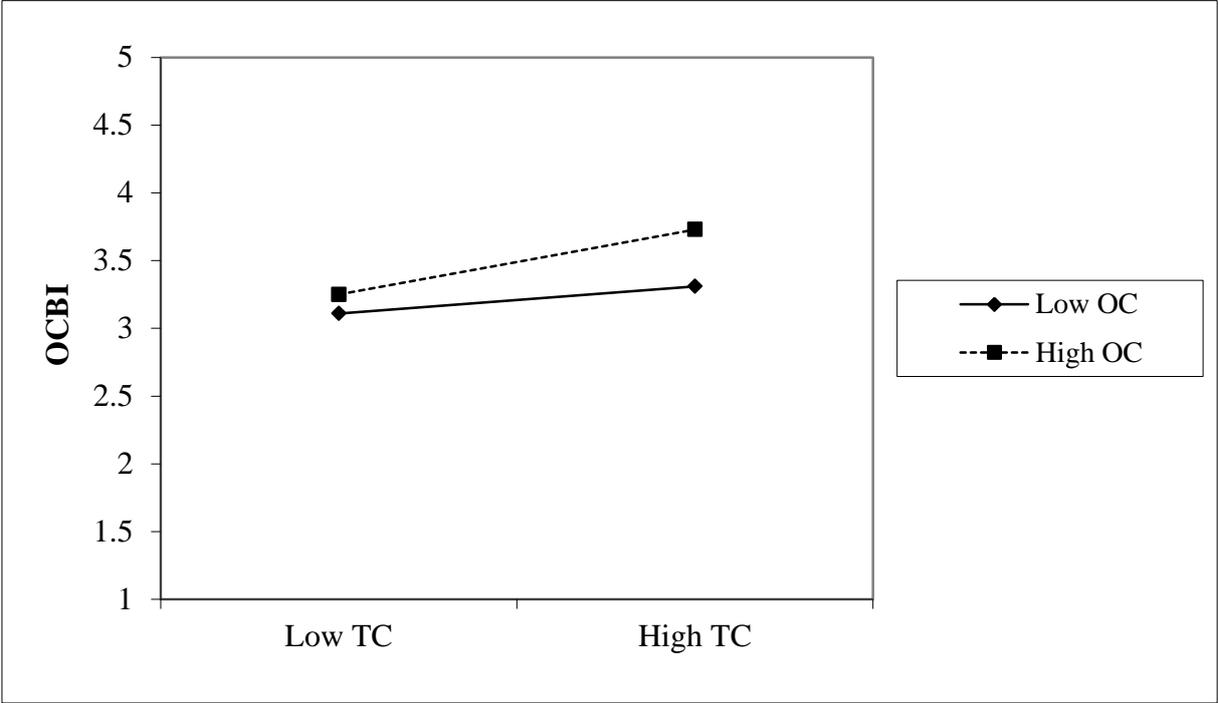


Figure 11: Organizational commitment as a moderator of the relationship between team commitment and team-directed citizenship behavior

Regression results for organization-directed efficacy beliefs (OEB). The regression findings for OEB are displayed in Table 2 (models 1b to 4b). We hypothesized that TC would add to and reinforce the positive effect of OC on OEB. However, TC did not improve the prediction (R^2 -change = .00; $p = .21$; see model 3b). While the interaction effect reached significance ($\beta = -.08, p < .01$), Figure 3 suggest that the effect was compensatory rather than synergistic as we expected. H5a and H7 could thus not be confirmed.

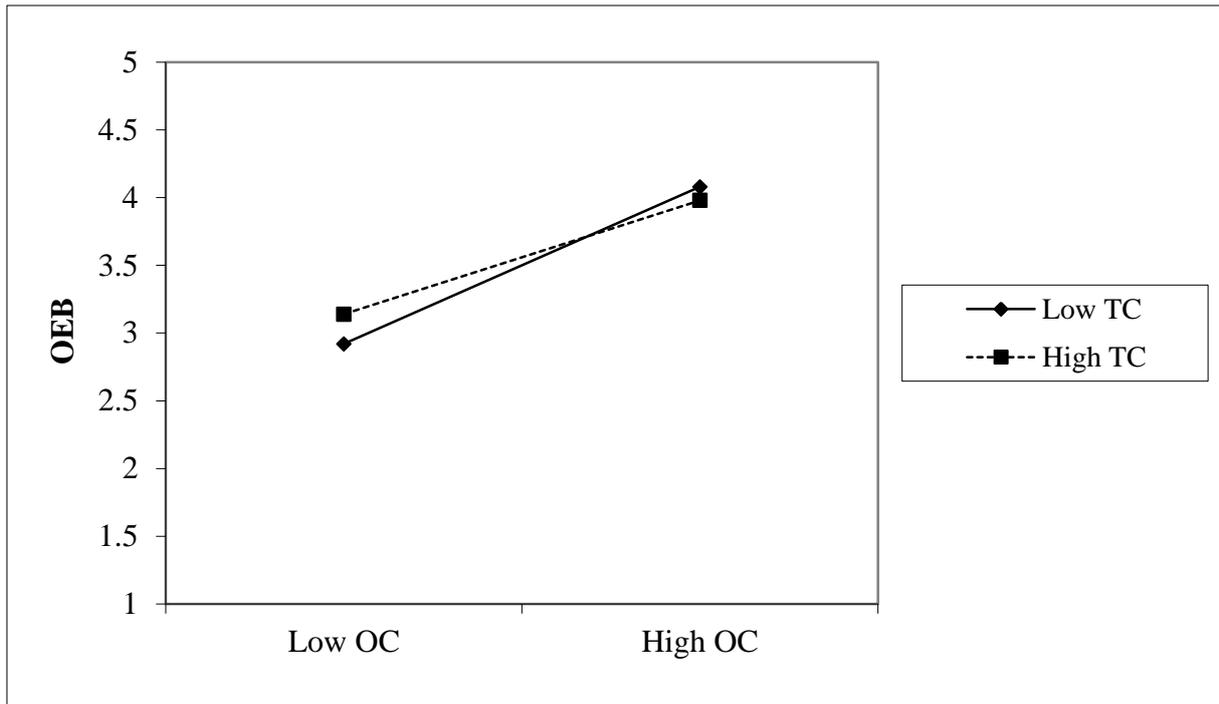


Figure 12: Team commitment as a moderator of the relationship between organizational commitment and organization-directed efficacy beliefs

Regression results for team-directed efficacy beliefs (TEB). As shown in Table 2 (model 2e), there is a strong positive effect of TC on TEB ($\beta = .59, p < .01$). It accounts for 34.1% of incremental variance after controlling for tenure and gender. OC adds to this effect, as proposed by H6a ($\beta = .09, p < .01; R^2\text{-change} = .01; p < .01$; see model 3e). However, the hypothesized enhancement effect of OC on TC (H12) was not borne out ($\beta = -.03, p = .27$). Hence, while H6a was confirmed, H8 could not be supported.

Regression results for organization-directed turnover intentions (OTI). Models 1c to 4c in Table 8 show the results for OTI. The expected incremental effect of TC on OTI after controlling for OC was supported ($\beta = -.07, p < .01$; see model 3c). TC thus reduces OTI independently of OC. Moreover, a significant interaction effect was found ($\beta = .06, p < .01$, see model 4c in conjunction with Figure 4 below). Contrary to the expected enhancement effect, however, TC partly compensated the negative effect of OC on OTI. Although significant at .01 level, the effect was rather small ($R^2\text{-change} = .003; p < .01$). The total amount of variance explained by TC, OC, and TC x OC is 39.9% (see model 4c). Hence, while 9a could be supported, H11 was not borne out.

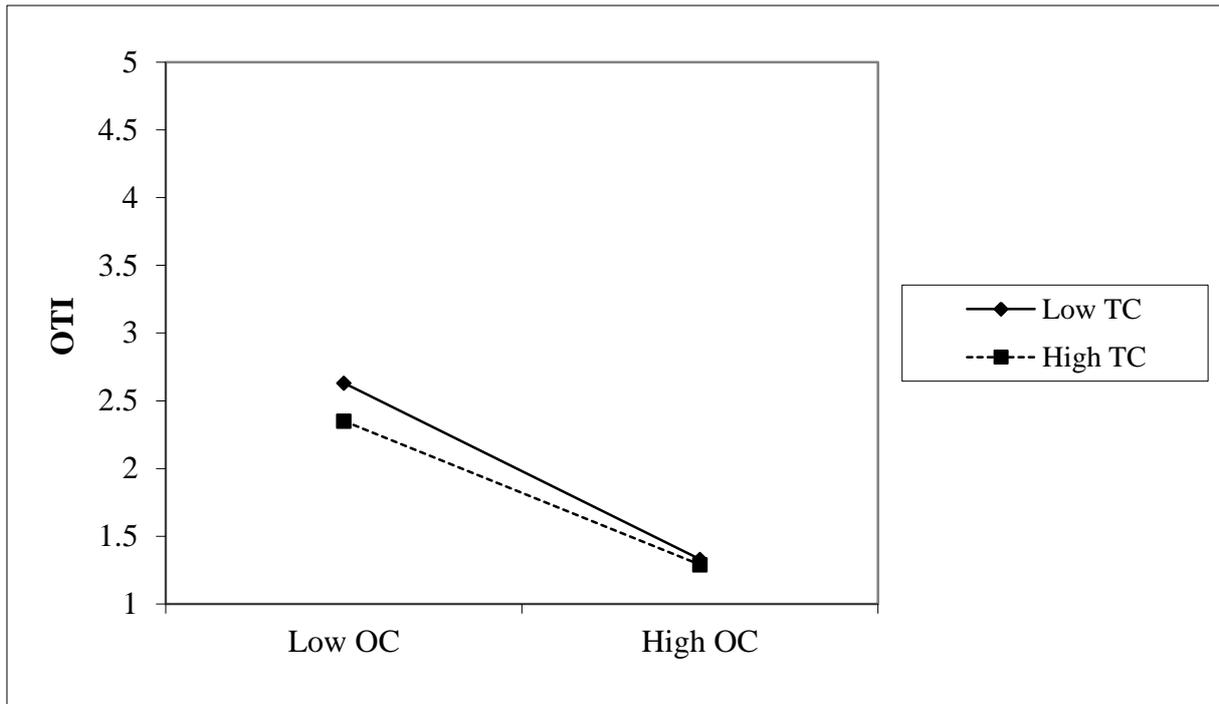


Figure 13: Team commitment as a moderator of the relationship between organizational commitment and organization-directed turnover intentions

Regression results for team-directed turnover intentions (TTI). TTI results are found in Table 9, models 1f to 4f. We expected that OC would add to TC in predicting this outcome (H14a) and make the negative effect of TC more negative (H15). However, none of these effects was borne out by the survey data. The overall amount of 34% of explained variance is almost entirely due to the effect of team commitment ($\beta = -.57, p < .01$; see model 4e). H10a and H12 thus had to be discarded.

Summary of regression outcomes. To sum up, our regression results fully support the hypothesized additive and interactive cross-over effects for employee citizenship behavior (H1a, H2a, H3, H4). With regard to the organization-level components of efficacy beliefs and turnover intentions, TC was found to add to but not enhance the effects of organizational commitment, thus confirming H5a and H9a but not H7 and H11. The team-level components of these outcomes were most strongly predicted by team commitment. Organizational commitment explained some additional variance in team-directed efficacy beliefs, as proposed by H6a, but not in team-directed turnover intentions, as proposed by H10a.

Synergistic effects could not be observed. The interaction hypotheses H8 and H12 were thus not confirmed.

5.3.4.4 Person-centered analyses using analysis of covariance

ANCOVA results for organization-level outcomes. We hypothesized that the DC group displays higher levels of organization-directed citizenship behavior (H1b), efficacy beliefs (H5b) and turnover-intentions (H9b) than the UC-O group. As shown in Table 5, only the hypothesis for organization-directed citizenship behavior could be confirmed. After adjusting for gender, team tenure, and organizational tenure, the UC-O group scored significantly lower on this outcome variable than the DC reference group ($b = -.23, p < .01$). However, the effect was rather small ($\eta_p^2 = .01$). With regard to organization-directed efficacy beliefs, significant differences were observed between the DC group and the UC-T group ($b = -.61, p < .01$) and between the DC group and the NC group ($b = -.87, p < .01$), but not between the DC group and the UC-O group ($b = .00, p = .99$) as we had expected. Likewise, the UC-T and the NC groups were more likely to leave the organization than dually committed employees ($b = 1.02, p < .01$; and $b = 1.44, p < .01$). However, the difference for the UC-O group was not significant ($b = .13, p = .16$). Overall, H1b was confirmed but not H5b and H9b.

Table 12: *Analysis of Covariance Results for Organization-Directed Citizenship Behaviors, Efficacy Beliefs, and Turnover Intentions*

| Variables | A) Organization-directed citizenship behavior | | | | B) Organization-directed efficacy beliefs | | | | C) Organization-directed turnover intentions | | | |
|-----------------------|---|-------------|----------|------------|---|-------------|----------|------------|--|-------------|----------|------------|
| | <i>B</i> | <i>SE B</i> | <i>p</i> | η_p^2 | <i>B</i> | <i>SE B</i> | <i>p</i> | η_p^2 | <i>B</i> | <i>SE B</i> | <i>p</i> | η_p^2 |
| Controls | | | | | | | | | | | | |
| Gender | | | | | | | | | | | | |
| Male (ref.) | | | | | | | | | | | | |
| Female | -.14 | .11 | .20 | -.04 | .16 | .12 | .17 | .00 | -.44 | .15 | .00 | .01 |
| Organizational tenure | | | | | | | | | | | | |
| 1 - 4 years (ref.) | | | | | | | | | | | | |
| 5 years or more | .33 | .05 | .00 | .03 | -.23 | .06 | .00 | .01 | .20 | .07 | .00 | .01 |
| Team tenure | | | | | | | | | | | | |
| 1 - 4 years (ref.) | | | | | | | | | | | | |
| 5 years or more | .10 | .06 | .10 | .00 | .00 | .07 | .99 | .00 | .05 | .08 | .56 | .00 |
| Between-Groups | | | | | | | | | | | | |
| DC (ref.) | | | | | | | | | | | | |
| UC-O | -.23 | .07 | .00 | .01 | .00 | .07 | .99 | .00 | .13 | .09 | .16 | .00 |
| UC-T | -.42 | .07 | .00 | .03 | -.61 | .07 | .00 | .05 | 1.02 | .09 | .00 | .09 |
| NC | -.48 | .06 | .00 | .05 | -.87 | .06 | .00 | .13 | 1.44 | .08 | .00 | .21 |

Note. Unstandardized coefficients (*B*) are shown. These indicate the differences in means between the comparison group and the reference group based on the 1 to 5 scale

ANCOVA results for team-level outcomes. Our hypotheses were that the DC group shows higher levels of team-directed citizenship behavior (H2b), efficacy beliefs (H6b) and turnover-intentions (H10b) than the UC-T group. Again, only the hypothesis for team-directed citizenship behavior could be confirmed. Table 6 shows that the UC-T group had a significantly smaller score on this outcome variable than the DC group ($b = -.34, p < .01$), at a small effect size ($\eta_p^2 = .02$). No significant differences between the two groups were observed for team directed efficacy beliefs ($b = -.11, p = .11$) and team-directed turnover intentions ($b = .23, p = .06$). Hence, while H2b was confirmed, H6b and H10b were not.

Summary of analyses of covariance. In summary, our ANCOVA results showed that dually committed employees had higher levels of team- and organization-directed citizenship behavior than employees with unilateral or no commitments (H1b and H2b). However, there was no evidence of higher levels of team- and organization-directed efficacy beliefs or lower levels of team- and organization-directed turnover intentions.

Table 13: *Analysis of Covariance Results for Team-Directed Citizenship Behaviors, Efficacy Beliefs, and Turnover Intentions*

| Variables | A) Team-directed citizenship behavior | | | | B) Team-directed efficacy beliefs | | | | C) Team-directed turnover intentions | | | |
|-----------------------|---------------------------------------|-------------|----------|------------|-----------------------------------|-------------|----------|------------|--------------------------------------|-------------|----------|------------|
| | <i>B</i> | SE <i>B</i> | <i>p</i> | η_p^2 | <i>B</i> | SE <i>B</i> | <i>p</i> | η_p^2 | <i>B</i> | SE <i>B</i> | <i>p</i> | η_p^2 |
| Controls | | | | | | | | | | | | |
| Gender | | | | | | | | | | | | |
| Male (ref.) | | | | | | | | | | | | |
| Female | -.14 | .11 | .21 | .00 | .04 | .11 | .71 | .00 | -.04 | .17 | .80 | .00 |
| Organizational tenure | | | | | | | | | | | | |
| 1 - 4 years (ref.) | | | | | | | | | | | | |
| 5 years or more | .55 | .06 | .00 | .07 | -.01 | .05 | .83 | .00 | -.03 | .08 | .75 | .00 |
| Team tenure | | | | | | | | | | | | |
| 1 - 4 years (ref.) | | | | | | | | | | | | |
| 5 years or more | .08 | .06 | .22 | .00 | -.08 | .06 | .17 | .00 | -.02 | .10 | .81 | .00 |
| Between-Groups | | | | | | | | | | | | |
| DC (ref.) | | | | | | | | | | | | |
| UC-O | -.50 | .06 | .00 | .05 | -.75 | .07 | .00 | .08 | 1.41 | .11 | .00 | .12 |
| UC-T | -.34 | .07 | .00 | .02 | -.11 | .07 | .11 | .00 | .23 | .11 | .06 | .00 |
| NC | -.50 | .06 | .00 | .05 | -.96 | .06 | .00 | .17 | 1.49 | .09 | .00 | .17 |

Note. Unstandardized coefficients (*B*) are shown. These indicate the differences in means between the comparison group and the reference group based on the 1 to 5 scale

5.4 Discussion

The aim of this study was to investigate the joint impact of team and organizational commitment on employees' team- and organization-directed citizenship behavior, efficacy beliefs and turnover intentions. Existing research based on the target similarity principle suggests that commitment to one target is all that is needed to influence behavior directed at the same target. Therefore, commitment to the other target should be largely redundant in predicting target-specific behaviors, resulting in compensatory interactions. By contrast, van Dick et al. (2008) proposed that team and organizational commitment should interact synergistically to enhance employee performance outcomes because of satisfied needs for self-consistency and optimal distinctiveness. Although our hypotheses were based on van Dick et al.'s (2008) reasoning, our study provides support for both perspectives and shows that interactions may work in one direction (e.g. organization) but not the other (e.g. team). Furthermore, the adoption of a person-centered approach brought insight into the meaning of

dual commitment by showing that different team and organizational commitment profiles exist and differentially relate to outcome components.

With regard to employee citizenship behavior, we could show that team commitment predicts the organization-directed component over and above organizational commitment and, conversely, that organizational commitment predicts the team-directed component over and above team commitment. More importantly, however, we could show that the two commitments interact synergistically to promote the target-specific components of citizenship behavior. This means that employees' performance at both the organization and the team level can be enhanced if both commitments are high. Our person-centered analysis corroborates this finding. It shows that dually committed employees can be meaningfully distinguished from other commitment profiles (i.e. unilateral commitment, non-commitment), and that these employees display comparatively higher levels of team- and organization-directed citizenship behavior. Our study thus extends previous findings from van Dick et al. (2008) who also demonstrated enhancement effects but did not distinguish between the two outcome components. Considering the seemingly small amounts of incremental variance explained by the observed interactions (i.e. 0.5% for the organization-directed component and 1.4% at the team-directed component), critics may argue that the effect sizes are not meaningful for practitioners. However, Evans (1985) has shown that moderator effects are often underestimated in regression analyses because the main effects are already entered in previous blocks and thus partialled out. Therefore, even interactions accounting for as little as 1% of the total variance may be considered substantial.

In their study, Van Dick et al. (2008) requested a clarification whether the interactive effects of team and organizational attachment would persist beyond employee citizenship behavior and apply symmetrically to other outcomes. As far as employees' efficacy perceptions and turnover intentions are concerned, however, our results do not support the proposed enhancement effects. With regard to team-directed efficacy beliefs, we observed an additive effect of organizational commitment beyond that of team commitment. Apparently, team members are more likely to have confidence in their team's ability to perform a collective task if they feel positive about the organization as a whole. However, this incremental effect was only marginal. Our person-centered analysis shows no significant difference in team-directed

efficacy perceptions between dually committed employees and those that are unilaterally attached to their team. Team commitment was clearly the strongest predictor of team-directed efficacy beliefs, suggesting that if team commitment is lacking, confidence in one's team may be considerably diminished regardless of the level of organizational commitment. Furthermore, given that there was no significant interaction, organizational commitment seems to add but not to compensate or reinforce the positive effect of team commitment on this outcome variable (independent effect). The picture is slightly different for organization-directed efficacy beliefs. While our results show no incremental predictive value of team commitment beyond organizational commitment, a significant compensatory effect was present. This means that team commitment can partially make up for lost grounds on organizational efficacy beliefs if team members' organizational commitment is low. It is thus consequential that dually committed employees do not hold a stronger belief in their organization's efficacy than employees that are unilaterally attached to the organization, as our person-centered analysis has shown. However, employees that are unilaterally attached to their team hold higher organization-directed efficacy beliefs than the non-committed group. Overall, our findings for collective efficacy beliefs support the target similarity principle because one commitment seems to be largely sufficient to predict the outcome component at the same target level.

With regard to team-directed turnover intentions, team commitment showed to be a highly important predictor with 34% of explained variance. Organizational commitment did not explain additional variance, nor did it interact with team commitment to affect this outcome. Hence the intention to remain with one's team seems to depend on one's team commitment and remain largely unaffected by how one feels about the organization as a whole. Conversely, however, team commitment seems to have an impact on organizational turnover intentions over and above organizational commitment. While organizational commitment is clearly the more important predictor, we observed a significant interaction effect such that a lack of organizational commitment can be partly compensated by a high team commitment. This compensation effect is also reflected in the person-centered finding that dually committed employees are no more likely to stay with the organization than employees with a unilateral organizational commitment. However, those that are unilaterally attached to their

team are more likely to stay than those that are non-committed. As with efficacy beliefs, our results for turnover intentions support the validity of the target similarity principle.

5.5 *Limitations*

The cross-sectional design of our study precludes causal inferences. For instance, it is conceivable that commitment affects efficacy beliefs as much as vice versa. When individuals perceive their team or the organization as highly effective, they may also feel more committed toward these entities. Similarly, the display of citizenship behaviors may lead to more positive attitudes toward the organization or the team and thereby increase employees' team and organizational commitment. In this sense, the relationship between commitment and efficacy beliefs and commitment and citizenship behavior may more appropriately be conceived of as interdependent. However, these interdependencies do not diminish the importance of dual commitment for organizations or invalidate the interactions that we have observed. Our focus was on commitment as the antecedent variable in what otherwise may be an interdependent relationship.

A second limitation is that all our data are self-report. It may be argued that more objective outcome indicators such as supervisor or peer ratings of citizenship behavior, or actual turnover rates rather than turnover intentions, might have increased the validity of our study. However, it should be noted that citizenship behaviors, by definition, at least partly escape the attention of supervisors and peers. Furthermore, meta-analytic evidence demonstrates that the difference in OCB ratings is typically quite small between self- and other-raters (Carpenter, Berry, & Houston, 2014). Similarly, turnover intentions can only be measured subjectively, and research has demonstrated a strong relationship between behavioral intentions and actual turnover (Steel & Ovalle, 1984). Our results should thus be sufficiently valid. Furthermore, as van Dick et al. (2008) have pointed out with regard to their interactions, common method variance cannot artificially increase interaction effects in regression analyses. Rather, they tend to be underestimated because the main effects have already been entered in a preceding step of the regression (see McClelland & Judd, 1993).

5.6 Theoretical Implications and Directions for Future Research

Overall, our findings suggest that van Dick et al.'s (2008) enhancement hypothesis applies to outcomes regarding how employees perform their work and thus have a direct impact on team and organizational functioning. Our focus was on extra-role behavior such as supporting the organization or courtesy toward other team members. Future research should examine if in-role performance (e.g. supervisor ratings based on job demands) may be similarly affected by the interplay of team and organizational commitment.

The results for the other outcomes (i.e. team- and organization-directed efficacy beliefs and turnover intentions) seem to confirm the target similarity principle. However, the failure to find supporting evidence for the hypothesized synergistic interactions in our study may be because the outcome levels were already very high (in the case of efficacy beliefs) or low (in the case of turnover intentions) at high levels of the focal commitment. There was thus little room for a further increase or decrease by entering the non-focal commitment, and thus for a synergistic interaction to occur. Future research should examine if synergistic interactions are more likely when the effect of the focal commitment is less pronounced or when high levels of the focal commitment result in only moderate levels of the outcome variable.

With regard to efficacy beliefs and turnover intentions, we also observed that the compensatory interaction only worked for the organization-level but not the team-level components. We thus speculate that team members tend to generalize efficacy beliefs and turnover intentions from the lower-order entity (team) to the higher-order entity (organization) but not vice versa. More generally put, a strong team commitment may predispose one to perceive the organization in more positive terms, whereas positive attitudes toward the organization do not necessarily feed into perceptions of lower-order entities such as teams, workgroups, departments, and so on. Future multi-foci research should consider this possibility when investigating interactions between nested commitments (e.g. team - organization; supervisor - organization; clients - organization).

Finally, we have raised the possibility that team and organizational commitment may be negatively correlated when employees perceive team and organizational values as incompatible. Consequently, the degree of compatibility or overlap between team and

organizational identities may be an important three-way moderator of the two-way interaction between nested commitments. For instance, if there is little overlap, team and organizational commitment are unlikely to add to and enhance each other to generate high levels of citizenship behavior. It is under these conditions when the person-centered approach realizes its full potential because variable-centered approaches have very limited power to detect complex interactions (Aguinis, Gottfredson, & Wright, 2011).

5.7 Practical Implications

Our study underlines the value of dual commitment for the display of employee citizenship behavior toward the organization and the team. The question thus arises what can be done to promote such a bond. Perhaps one of the most important levers is leadership, especially that which is displayed by team leaders. The commitment literature is replete with evidence highlighting the role of leadership in forming employees' attitudes and behavior toward organizationally relevant entities (Franke & Felfe, 2011; Meyer et al., 2002). Clearly, team leaders should foster their followers' identification with both the team and the organization. Besides promoting special slogans, nicknames, logos, and rituals relevant to the team, or praising the team when showing good performance, team leaders should also appeal to the overarching organizational mission, and create awareness of the interdependencies that exist with other teams to achieve organizational goals. Followers that are thus led to combine their team and organizational commitment into a perception of dual commitment may be more successful in performing their roles as team players and organizational citizens. Against this backdrop, it may equally be worth asking how leaders can manage to build a dual commitment when there is little overlap between team and organizational values, or when the organizational identity is rather distal and abstract.

6 Overall Discussion

6.1 Summary

Faced with declining birth rates and a shortage of skilled labor, companies in Europe and elsewhere seek to raise their employees' commitment in order to build and maintain a competitive edge (Carvalho & Areal, 2015; Fulmer et al., 2003). The aim of this dissertation was to give an overview of the situation of employee commitment in Europe, and investigate how the interplay of team and organizational commitment affects employees' interteam conflict handling and other relevant workplace outcomes. Based on an in-depth review of the commitment literature, the thesis first compared different European countries and regions in terms of their commitment levels, and examined the role of culture and other influencing factors. The focus was on organizational commitment (Meyer & Allen, 1991; Meyer & Herscovitch, 2001) because it is still the only commitment with a sufficiently large database to allow comparisons across countries. Notwithstanding the methodological challenges of the review (e.g. drawing inferences from individual-level studies to the country and regional level), some interesting patterns of difference emerged. For example, OCA seems to be higher in Germanic Europe (Germany, Austria, Netherlands) than in other European countries and regions. European OCC levels are more homogeneous and generally lower than OCA levels, albeit still higher than in most other parts of the world. Finally, OCN levels are comparatively low (Fischer & Mansell, 2009; Meyer et al., 2012). With regard to culture, the review showed that collectivism is positively associated with OCA at both the individual and the country level, and strengthens the meaning of OCA for important employee outcomes (e.g. citizenship behavior) (Gelade et al., 2006; Meyer et al., 2014). Furthermore, collectivism seems to enhance the relationship between commitment and its group- or interaction-related antecedents (e.g. leadership), while individualism is reinforcing antecedents that revolve around individual growth and achievement (e.g. intrinsic job satisfaction) (Felfe, Yan, et al., 2008; Wasti, 2003).

Finally, the review highlighted current issues that have been addressed by European scholars, namely the meaning of dual commitment in the context of contingent employment (i.e. temporary workers' commitment to their employing agency and the hiring client; see Felfe,

Schmook, et al., 2008) and international assignments (i.e. expatriates' commitment to their parent company and the local operation; see Nguyen et al., 2015). This research has shown that commitments to different targets may combine and interact meaningfully to influence employee outcomes within specific work contexts. For example, high-level parent company commitment was found to attenuate the effect of the local operation commitment on the decision of expatriate managers to stay or leave the international assignment (Nguyen et al., 2015).

Taking up the line of research on multiple commitments, the thesis has examined the joint impact of team and organizational commitment on employees' interteam conflict handling as a crucial factor for organizational performance and success. The data were gathered from an experimental study (N = 179) and a cross-sectional survey (N = 692) to ensure both internal and external validity. This analysis has shown that unilateral commitments, whether to the team or the organization, contain specific risks when organizationally nested teams are in conflict with one another. A unilateral team commitment motivates employees to adopt a Dominating conflict strategy despite the negative consequences it can have for the overall organization. Conversely, a unilateral commitment to the organization was found to lead to the adoption of an Obliging conflict strategy which, in view of the mixed-motive character of nested interteam conflict, can be regarded as similarly dysfunctional for the overall organization as Dominating. A dual commitment, on the other hand, resulted in the highest levels of an Integrating conflict strategy which is considered the most functional conflict strategy under the widest range of circumstances. Importantly, the analysis showed that the effects of team and organizational commitment are not only additive or subtractive, but also interactive:

- 1) Organizational commitment buffered the harmful positive effect of team commitment on Dominating such that it was less positive when organizational commitment was high (competitive interaction).
- 2) Team commitment enhanced the positive effect of organizational commitment on Integrating such that it was more positive when team commitment was high (synergistic interaction).

- 3) Team commitment buffered the harmful positive effect of organizational commitment on Obliging such that it was less positive when team commitment was high (competitive interaction).
- 4) Team commitment compensated the negative effect of organizational commitment on Avoiding such that it was less negative when team commitment was high (compensatory interaction).

Clearly, the interplay of team and organizational commitment is an important motivational mechanism to explain employees' interteam conflict handling behavior. In light of the ubiquity of interteam conflict (Rahim, 2011; Tjosvold et al., 2014), companies should be aware of the insights that this thesis has provided and be careful not to foster one commitment at the neglect of the other. This is all the more true since today's trend in organizations toward more team-based structures may suggest that the promotion of team commitment has become more important than the promotion of organizational commitment. Confidence in the validity of the results is increased by the combination of survey and experimental evidence which largely converged.

Apart from interteam conflict handling, the thesis has also looked at how employees' team- and organization-directed citizenship behaviors, efficacy beliefs, and turnover intentions are affected by the interplay of team and organizational commitment. Based on self-consistency and optimal distinctiveness theory, it was proposed that the two commitments reinforce each other in their target-specific effects on each outcome component. The relationships were examined from both a variable-centered and a person-centered perspective. Evidence from a survey study with $N = 1'362$ respondents confirmed the expected enhancement effects for team- and organization-directed citizenship behavior. Dually committed employees scored higher on both citizenship behavior components than employees with other commitment patterns. For example, employees with a strong team commitment were more willing to help other team members if they also had a strong organizational commitment. Conversely, employees with a strong organizational commitment were more likely to participate in voluntary organizational events if they showed a high team commitment.

For organization-directed efficacy beliefs and turnover intentions, however, the interaction was compensatory rather than synergistic. Employees with a dual commitment did not score

higher on these outcome components than employees with a unilateral organizational commitment or other attachment patterns. With regard to the team-directed efficacy beliefs and turnover intentions, neither additive nor interactive effects were observed. While there are some limitations (i.e. cross-sectional, self-report), the findings are theoretically and practically meaningful and underline the importance of dual commitment.

In summary, the results of the thesis converge in suggesting that a dual commitment constitutes a substantial benefit for organizations. Compared with other commitment patterns, which are common among employees, it reduces the likelihood of Dominating, Obliging, and Avoiding, while increasing the likelihood of Integrating. Furthermore, being dually committed motivates employees to go beyond their immediate job requirements and expend extra effort on behalf of their team and the overall organization.

A particular strength of the thesis lies in the combination of experimental and survey data for the study of commitment and interteam conflict handling. Most of what is known about commitment is based on correlational analyses of survey data and is subject to all the limitations of such designs. By contrast, the thesis directly manipulated team and organizational commitment in reality-based and context-rich conflict scenarios. The causal effects of different commitment constellations on employees' conflict handling could thus be systematically determined. The fact that the observed effects were largely supported in a subsequent survey adds external validity to the experimental findings.

Having said that, the study of the relationship between team and organizational commitment and other important employee outcomes (citizenship behavior, efficacy beliefs, and turnover intentions) was cross-sectional and thus precludes causal inferences. For example, it was argued that employees who are strongly committed to their organization and their team display higher levels of citizenship behavior toward these entities. However, it is also conceivable that the display of citizenship behavior enhances employees' attitudes toward their team and the organization, and thus increases their commitment. Hence the influence can be in both directions. This does not, however, diminish the importance of dual commitment or invalidate the synergistic interactions that were observed for citizenship behavior. The focus of the thesis was on commitment as the antecedent variable in what otherwise may be an interdependent relationship. Furthermore, the observed interactions were practically

meaningful because even small effects must be considered important (McClelland & Judd, 1993).

6.2 Theoretical Implications and Research Outlook

Existing multi-foci research has been mainly concerned with identifying the relative strength of the effects of different commitments on workplace outcomes. Extending this line of research, the results of this thesis underline the importance for researchers to look at combined and interactive effects and, in particular, become more attuned to the potential risks associated with specific (i.e. unilateral instead of dual) commitment patterns. In this respect, several contributions were made.

6.2.1 Dual commitment and interteam conflict handling

With regard to interteam conflict, a strong team commitment was found to foster a potentially harmful Dominating conflict strategy unless accompanied by a strong organizational commitment. This observation confirms previous findings from the common ingroup identity literature that a strong ingroup attachment (i.e. team commitment) can be a source of distorted intergroup relations that may be neutralized by strengthening a shared higher-order attachment (i.e. organizational commitment) (Gaertner & Dovidio, 2000). However, the thesis has also shown that the reverse pattern - i.e. a strong organizational commitment without a strong team commitment - can be equally problematic because it results in the highest levels of Obliging. Due to the social dilemma character of nested interteam conflict, Obliging can be seen as harmful as Dominating because it involves a win-lose orientation, whereas the achievement of organizational goals requires a willingness to integrate both teams' concerns (win-win orientation).

The finding for Obliging is theoretically interesting because it may be somewhat counterintuitive to the common ingroup identity approach which emphasizes the risks of strong subgroup commitments and the benefits of strong higher-order commitments. The findings of this thesis are that a strong organizational commitment also constitutes a risk for interteam conflict handling, namely when it is not accompanied by a strong team commitment. Hence recategorization strategies, which have typically been recommended

based on the common ingroup identity model, may not only be ineffective but also counterproductive as they try to minimize or eliminate the salience of strong subgroup identities. In fact, leaders - especially team leaders - may be more effective if they raise the salience of both the lower- and the higher-order entity, with a view toward strengthening their subordinates' dual commitment (to the team and the organization).

Further underlining the value of dual commitment, the systematic comparison of the different commitment constellations also showed that a strong dual commitment leads to the highest levels of Integrating. Integrating means that both sides are working together to maximize the achievement of organizational goals. The notion held by ingroup projection theorists (Wenzel et al., 2007) that a dual commitment may be a source of intergroup bias, especially when the subgroups are fully nested in a superordinate group, could not be supported.

Finally, with regard to Avoiding, one commitment was found enough to render the adoption of this conflict strategy unlikely. Apparently, as an affect-driven motivation to act, commitment makes individuals choose active responses to conflict. Either commitment significantly reduces the likelihood for employees to withdraw from a conflict and leave its outcomes to chance.

It is important to note that previous studies have also examined the relationship between multiple commitments/identifications and interteam conflict in organizations (Gaertner, Bachman, Dovidio, & Banker, 2001; van Dick et al., 2008). However, this thesis is the first to differentiate between different conflict management strategies and to integrate - via payout matrices in the vignette experiment - the tripartite social dilemma character of interteam conflict into its research design. In fact, unlike "classical" intergroup conflict (Sherif, 1958), nested interteam conflict involves not only two groups but two groups (i.e. the teams) and an additional third party (i.e. the overarching organization) whose goals can only be achieved through cooperation. However, the fact that there are shared, overarching goals does not a priori eliminate the opposing team goals. Instead, the opposing team goals have to be reconciled and integrated to maximize the outcome for the organization, even if this means that these teams' goals may not be fully achieved. This character, along with the differentiation into four different conflict strategies, led to the important finding outlined above that employees' conflict handling preferences can also be dysfunctional for the organization even if they feel

strongly committed to the organization but *not* to their team. It contrasts with the common ingroup identity model and recategorization strategies that consider subgroup commitments primarily as a risk and higher-order commitments as a remedy of distorted intergroup relations (Dovidio et al., 2009; Gaertner & Dovidio, 2000).

Besides this issue, the thesis' experimental research design also constitutes a contribution because it extends previous interteam conflict studies which are correlational in nature (Richter, West, van Dick, & Dawson, 2006). A stronger case can thus be made for commitment as a lever to elicit favorable interteam conflict handling responses on the part of the employees. Ways in which this can be done are discussed in the practical implications sections below.

6.2.2 Dual commitment and employee effectiveness

Besides interteam conflict, the thesis also investigated how team and organizational commitment combine and interact to affect employees' citizenship behavior, efficacy beliefs, and turnover intentions. This research was motivated by two considerations. First, by distinguishing between team- and organization-directed outcome components, it should be verified if the enhancement effect found for citizenship behavior in previous research (i.e. van Dick et al., 2008) could be replicated at both the team and the organizational outcome level. Second, it should be examined if the proposed enhancement effect extends to other relevant workplace outcomes (i.e. team- and organization-directed efficacy beliefs and turnover intentions). The results confirmed the enhancement effect for team- and organization-directed citizenship behavior but not for team- and organization-directed efficacy beliefs and turnover intentions. The failure to find corroborating evidence for efficacy beliefs and turnover intentions may be because their outcome levels were already very high (in the case of efficacy beliefs) or low (in the case of turnover intentions) at high levels of the focal commitment (e.g., a high organizational commitment involved a high level of organization-directed efficacy beliefs and a low level of organization-directed turnover intentions). There was thus little remaining variance to be explained by adding the non-focal commitment, and the showing of a synergistic interaction became unlikely.

Overall, the thesis has demonstrated the value of dual commitment for organizations. Apparently, the effects of team and organizational commitment are interrelated, and it seems necessary to look at their combined and interactive influence before any safe conclusion about the potential benefits of either commitment can be drawn. Self-consistency and optimal distinctiveness theory, along with other insights from the identification literature, have proven to be a theoretically rich starting point for this kind of research. However, the matter becomes increasingly complex when considering the limited focus of this thesis on the affective form of commitment. Commitment can also emerge from a felt moral obligation to a target (normative commitment), and from an awareness of the costs associated with leaving the target (calculative commitment). Furthermore, it can be experienced toward targets other than organization and team (i.e. supervisors, occupations, clients, etc.), and its effects are felt not only by the employer but also by the employees themselves. This means that combinations and interactions can occur among different forms as well as different targets of commitment, and these combinations may affect employers and employees alike. Researchers have only just begun to integrate these considerations into their research design and theorizing. In the context of healthcare professions, for example, Felfe and Franke (2012b) found that affective commitment to the organization (e.g. a hospital or a nursing institution) and to patients was positively related to stress among healthcare workers. These relationships were more pronounced the higher the workers' normative commitment to their organization was. Clearly, more research of this kind is needed to fully understand the impact of employee commitment on organizations and the people in it. Researchers are thus encouraged to be more attuned to the combinations and interactions of multiple commitments in the workplace, and to think about their positive as well as their potentially negative effects. The person-centered approach may prove particularly useful for this kind of study because it can accommodate complex interactions and reveal how these interactions operate within individuals.

6.3 Practical Implications

Teams are the basic building blocks of modern organizations. Despite the growing importance of team work and team commitment, this thesis has demonstrated that organizations stand to gain a lot by fostering a sense of dual commitment. This may not always be easy. Especially if the organization is perceived as distal and abstract, the generation of commitment to both the

team and the organization can be challenging. However, there are important levers that can be employed to promote such a bond. One such lever is leadership, especially that which is displayed by team leaders (i.e. department heads, workgroup supervisors, etc.). On the one hand, team leaders must emphasize what makes their team unique within the organization to accommodate followers' distinctiveness needs. This can be achieved by, among other things, encouraging the production of unique team artefacts (e.g. special language, slogans, nicknames, logos, rituals, clothing, or other symbols) and praising the team when showing good performance. Furthermore, team leaders should stand up for the team when it is under attack or unduly criticized from outside. At the same time, however, care must be taken to avoid such behavior's creating parochial and isolationist subunit tendencies that may distort interteam relations and ultimately harm the organization. Different techniques, referred to by the literature as substantive and symbolic management practices, are available to promote the overarching commitment. While substantive management refers to "real, material changes in organizational practices" (Ashforth & Johnson, 2001, p. 37), symbolic management denotes "the ways that management portrays the organization to members, and tends to focus on what is (or is presumed to be) central, distinctive, and relatively enduring about the organization" (p. 38). Among the levers leaders can employ to induce a higher-order attachment are: articulating an overall mission and emphasizing the team's contribution to that mission; making team members aware of the interdependencies with other teams in the organization, highlighting the organization's distinctive features in terms of history, tradition, people, and products; socializing newcomers collectively with an emphasis on the overall organizational identity; attributing negative organizational developments to external sources; invoking metaphors and labels such as family or community to characterize the organization; relating stories and myths and crafting traditions and rituals that glorify the organization; sponsoring and carrying out organization-wide social events, and so on (cf. Ashforth & Johnson, 2001). Followers that are thus led to experience a sense of dual commitment are more satisfied in terms of self-consistency and optimal distinctiveness needs, and should be more willing to perform their roles as team players within and across teams. If the proposed distinction between different foci of leadership behavior is worth making, more specific measures of leadership should result in better predictions of employees' commitment to different targets (including dual commitment), and ultimately better predictions of the leadership-performance relationship.

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Appendix

Table A1: *Realism Ratings*

| Scenario | Mean | SD |
|------------|------|------|
| Scenario 1 | 4.00 | 1.04 |
| Scenario 2 | 4.36 | 0.80 |
| Scenario 3 | 4.29 | 0.75 |
| Scenario 4 | 3.75 | 1.18 |
| Scenario 5 | 4.17 | 0.97 |
| Scenario 6 | 4.29 | 0.98 |
| Scenario 7 | 4.06 | 1.03 |
| Scenario 8 | 3.93 | 1.19 |

Note. n = 46. The means and standard deviations relate to the 5-point scale from 1 (not at all realistic) to 5 (very realistic).

Table A2: *T-Test Results for Manipulation Checks of Experimental Factor Conditions*

| Scenario | Condition | Mean | SD | <i>t</i> | <i>df</i> | <i>p</i> | η^2 |
|------------|-----------|------|-----|----------|-----------|----------|----------|
| Scenario 1 | OC high | 4.1 | 1.2 | 4.19 | 43 | .00 | .29 |
| | OC low | 2.7 | 1.2 | | | | |
| | TC high | 4.8 | 0.5 | 4.61 | 22 | .00 | .34 |
| | TC low | 3.3 | 1.3 | | | | |
| Scenario 2 | OC high | 4.2 | 1.1 | 7.01 | 41 | .00 | .54 |
| | OC low | 1.9 | 1.1 | | | | |
| | TC high | 4.6 | 1.0 | 3.26 | 35 | .00 | .20 |
| | TC low | 3.5 | 1.3 | | | | |
| Scenario 3 | OC high | 4.4 | 0.9 | 5.09 | 31 | .00 | .39 |
| | OC low | 2.5 | 1.5 | | | | |
| | TC high | 4.7 | 0.5 | 6.15 | 26 | .00 | .48 |
| | TC low | 2.4 | 1.6 | | | | |
| Scenario 4 | OC high | 4.3 | 1.0 | 6.38 | 44 | .00 | .48 |
| | OC low | 2.2 | 1.2 | | | | |
| | TC high | 4.2 | 1.3 | 3.79 | 44 | .00 | .25 |
| | TC low | 2.7 | 1.5 | | | | |
| Scenario 5 | OC high | 3.8 | 1.4 | 4.01 | 43 | .00 | .27 |
| | OC low | 2.0 | 1.5 | | | | |
| | TC high | 4.6 | 0.7 | 7.56 | 35 | .00 | .57 |
| | TC low | 2.0 | 1.5 | | | | |
| Scenario 6 | OC high | 4.0 | 1.2 | 5.88 | 42 | .00 | .45 |
| | OC low | 1.9 | 1.2 | | | | |
| | TC high | 3.8 | 1.5 | 4.88 | 42 | .00 | .36 |
| | TC low | 1.8 | 1.2 | | | | |
| Scenario 7 | OC high | 4.0 | 1.2 | 4.41 | 41 | .00 | .32 |
| | OC low | 2.2 | 1.5 | | | | |
| | TC high | 4.8 | 0.5 | 6.33 | 23 | .00 | .49 |
| | TC low | 2.6 | 1.5 | | | | |
| Scenario 8 | OC high | 4.3 | 0.8 | 9.16 | 43 | .00 | .66 |
| | OC low | 1.8 | 1.0 | | | | |
| | TC high | 4.9 | 0.3 | 5.65 | 23 | .00 | .42 |
| | TC low | 2.9 | 1.6 | | | | |

Note. *n* = 46. The means and standard deviations relate to the 5-point scale from 1 (not at all committed) to 5 (totally committed).

Table A3: *Pretest Ratings of the Conflict Options*

| Option | Mean | SD |
|-------------|------|------|
| Dominating | 2.72 | 1.44 |
| Integrating | 3.52 | 1.43 |
| Obliging | 2.53 | 1.40 |
| Avoiding | 1.80 | 1.19 |

Note. n = 46. The means and standard deviations relate to the 5-point scale, with higher values indicating higher levels of acceptance of a conflict strategy

Eidesstattliche Erklärung

Hiermit versichere ich, dass ich die Dissertation selbstständig und ohne unzulässige Hilfe verfasst habe. Insbesondere habe ich hierfür keine Hilfe von Vermittlungs- oder Beratungsdiensten (Promotionsberaterinnen bzw. Promotionsberater u.a.) in Anspruch genommen, keine anderen als die von mir angegebenen Quellen und Hilfsmittel benutzt und wörtliche oder sinngemäße Zitate als solche gekennzeichnet.

Basel, 01. September 2016

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