# Conceptualizing Alignment of People in Organizational Contexts: A Systematic Review of 13 Meta-Analyses

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# **Abstract**

This thesis aims to examine the focus in present literature on the alignment of people in an organizational context with regards to its conceptualization, whether it is seen as dependent or independent variable, its antecedents, its outcomes and how it can be measured. Therefore, a systematic review has been conducted, investigating the findings of 13 meta-analyses on the alignment of people.

Results show that there is homogeneity in how alignment is conceptualized, mainly as compatibility between a person and its environment. The dimensions of the environment vary, yet there is agreement on certain ones, such as person-job and person-organization alignment. Correlations with positive outcomes such as job and task performance, employee satisfaction, commitment, organizational citizenship behavior, and even health issues could be reassured. No investigation on disadvantages coming from alignment was found. Also, the studied meta-analyses have a clear focus on alignment as an independent variable, influencing attributes and thus rarely mention any antecedents of alignment. Antecedents and negative aspects of alignment are clearly outlined as areas where more meta-analytic research is necessary. Furthermore, definitions of how to measure alignment are not consistent or unified. They are based on primary collected data samples and no theoretical frame has been proposed to create greater generalizability. The majority of analyzed meta-analyses neglected the influence of point in time, time period and geographic origin of data collection on results, which indicates that further research is required within the field.

Next to elucidating concepts behind the term alignment, this thesis also aims to promote the use of the method of systematic literature review of secondary data, to rigorously use already available data, and to identify existing relationships among concepts.

# 1. Introduction

#### 1.1 Background

Throughout history, humankind has made technological and societal progress by cooperating with each other. Through organizing ourselves into teams, groups and organizations, we have collectively learned that, by doing things together we can make progress. As social creatures, our tendency to stick together never seem to have faded, and thus the phenomenon of management has naturally taken form. Management has been defined by Mintzberg (2009) as a practice to facilitate communityship between people, and is thus still very much prevalent in the contemporary setting as organizations still rely on human resources to get things done.

The concept of management is rather complex. Management encompasses many different disciplines, theories and thought processes, which are interpreted in a multitude of ways, making the concept rather ambiguous and hard to use consistently in practice and research (Mintzberg, 2009). This is because management touches upon all aspects of doing things within an organization. Everything from questions related to vision, strategy, workforce, supervision, to delegation of tasks, fits within management. As organizations evidently strive to be as effective and efficient as possible, these "components" of an organization need to be defined, and then designed to support each other.

One of the terms used within the subject of management to describe this is alignment. Just as many terms within management, alignment is broad in its definitions. The meaning of the word is, however, less difficult to comprehend. When discussing alignment, we are doing just that: talking about if the different aspects of an organization to some degree are pointing in the same direction or not (Kotter, 1999). Having such a broad term to describe one of the components of organizational efficiency can be helpful in practice, but it can also, paradoxically, confuse the research on the topic. Finally, as the topic of alignment is as broad

as it is, there are other terms that are used almost interchangeably with it, such as fit, which describe the same type of phenomenon.

In regards to the varied use of the term alignment, it is evident that researchers and practitioners alike use the term when describing different phenomena in slightly varied ways. For example, alignment has been used to describe the relation between strategy and environment within an organization (Habba et al., 2019), as well as the connectivity between workforce and supervisors (Leroy et al., 2018). More notably, there is no clear consensus within research if the focus of alignment should be to consider it as an dependent variable (that alignment is something that is created within the organization), or an independent variable (that alignment might be something that can create benefits by itself). The struggle to create a unified definition of alignment, accumulates into an ambiguity that makes the term difficult to measure.

#### 1.2 Purpose and Research Questions

The concept of alignment has for a long time been used to describe several different workforce phenomena within companies and organisations, and thus the aim of this thesis is to define the concept and find a common denominator to use when discussing, or working with, alignment. Specifically, the purpose of this thesis is to determine what alignment means in the context of people within an organization or company. To achieve this purpose, we will identify patterns in previously conducted research on the topic regarding which "fit" alignment seeks to describe, if the focus of the research has been on the creation of alignment or on the benefits alignment itself can create, as well as what methods are suggested to measure alignment.

We have thus defined the following research questions:

- How has alignment of people in organizations been framed in research thus far?
- Is the focus of available research on how to create alignment or on what benefits alignment can create? In other words, is it analyzed as a dependent or independent variable? What causes/antecedents and what consequences of alignment have been identified?
- How is alignment measured?

#### 1.3 Demarcations

To be able to finalize the work on this thesis within limitations that have been set externally, e.g. timeframe for thesis completion deadline, we have been forced to set some demarcations for the data analysis. One of these demarcations is that the thesis exclusively examines alignment research where the focus is on the relation between people and another part. This means that research focusing on alignment regarding organizational environment in relation to another type of organizational environment is not included in the data analysis. This particular demarcation is justified as people arguably can be seen as the foundation for all managerial phenomena, as organizations usually exist for the people, and as such it is the most relevant topic for research in regards to alignment.

Another demarcation that has been made is that all material included in the data analysis has been published in English. The justification for the exclusion of research written in other languages is that it is a safeguard against subpar translations and interpretation into English, which could negatively affect the quality of the thesis.

Finally, only meta-analyses have been included in the data analysis. This means that many other valid research papers on the topic of alignment have been excluded from analysis. This demarcation was defined to have the thesis remain as consistent, in relation to the interpretation of the data, as possible.

## 1.4 Disposition

To be able to answer the questions presented above in section 1.2, the following chapter elaborates in more detail on the theoretical background of alignment. The reason is to outline the relevance of the topic, as well as to present knowledge that is necessary for the presented analysis. As this thesis is structured around meta-analyses, the chosen approach to literature and data collection is outlined in the third chapter. Current findings, theory, and other conceptual works on the subject at hand are summarized qualitatively, as well as quantitatively, in the fourth chapter. In the fifth chapter, comparisons and findings from the collected meta-analyses, outlined in the previous chapter are discussed. This is followed by the limitations of the analysis, final conclusions, and suggestions for future research.

# 2. Theory

As outlined above, alignment is a broad concept describing various phenomena. Therefore, it is important to create a common understanding of this whole area, why and how it is of such significant importance for successful business and how it is connected to management, before it is further specified and examined.

Grant (2016) outlines that within a successful business strategy, competitive advantage is not only essential to create and establish, but equally important to maintain as a key success factor. He suggests that creating a barrier to imitation is one part of doing so and the more complex such a factor is, the harder it is to be imitated. Kathuria et al. (2007) expand upon this as they argue that a system of interlocked activities within a company is almost impossible to be copied by a rival. Creating this unique composition is done through integrating, connecting and adapting, shortly aligning, various components within an organization.

Consequently, alignment can be seen from different perspectives within a company. Kathuria et al. (2007) see alignment as the created harmony between strategy, structure and systems, to become high performing (strategic alignment). They distinguish between vertical and horizontal alignment, with regards to the consistency of decisions (vertical alignment) and the cross- or intra-functional coordination and integration (horizontal alignment). The latter refers to coherence in decision making across departments and within functions. Beehr et al. (2009) also focus on alignment of different parts within an organization's structure, but specifically in regards to the part's and the organization's core goals. They name this "structural alignment".

Kristof-Brown et al. (2005) approach alignment as the alignment or fit of a person and its environment (individual's fit). Crucial in this approach is that one part, or entity, is always human (an individual), and the environment it is dealing with can either be human (a supervisor) or non-human (job requirements). The dimensions of the environment reach from the whole organization to a coworker. They therefore propose different types of

person-environment (PE) fit in itself: person-vocation (PV), person-job (PJ), person-organization (PO), person-group (PG) and person-supervisor (PS). A third approach to alignment that is present in literature, is the specific alignment between an organization's IT and business strategy to exploit the many opportunities IT offers to reach a common goal (Monideepa and Sufian, 2009). This can be extended to the alignment of every specific strategy with the overall business strategy like human resource management strategies with the corporate objectives etc.

The different kinds of alignment are connected and visualized in figure 1. What builds the base of all components of an organization are strategic, structural and specific alignment. Between different departments either vertical alignment occurs, when the two parties are on different levels of the organization's hierarchy or horizontal alignment, when they are on the same level. When zooming in to an individual acting in a department, other kinds of alignment emerge, namely person-job fit (PJ), person-supervisor fit (PS) and person-group fit (PG). The individual can also be seen in connection to the whole organization, leading to person-organization fit (PO).

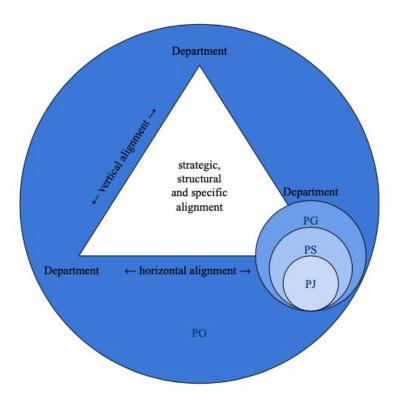


Figure 1: Types of alignment within an organization (PO = person-organization fit; PJ = person-job fit; PS = person-supervisor fit; PG = person-group fit)

When alignment has been achieved, most literature outlines various positive outcomes such as gaining and sustaining a competitive advantage and increasing performance at the overall business side, as well as satisfaction, commitment, and lower turnover rates at the more personal side. Even though it can be perceived as indirect, it creates an advantage for the company the employees work in. Authors seldom mention that "too much" alignment can lead to rigidity and therefore to difficulties when adapting to externally changing circumstances (Kathuria et al., 2007).

Counterintuitively, few studies have been performed on how to foster alignment within a company. Beehr et al. (2009) is one of these exceptions. They argue, that knowing what causes alignment, and thereby the various beneficial outcomes, would help managers to increase it. Thereby, they focus on processes that align people and subunits that are already existing in the organization. This leads to the exclusion of recruitment strategies or applicants' characteristics. They outline socialization processes as antecedent of alignment, yet only with regards to the single individual.

To structurally align subunits horizontally and vertically within an organization, they outline three possible antecedents. First, to clarify goals and objectives, but also as a general precondition to any kind of alignment, they outline clear and continuous communication. Only if the organization (the environment) clearly communicates its objectives, the other entity is able to align with them (PO fit). Second, they argue that employee enhancement is increasing the degree of alignment. Employee enhancement is seen as the organization's assistance to achieve goals together, expressed through skill improvement (with regard to the skills the organization needs, PJ fit), role clarity, group participation (PG fit) and empowerment (autonomy and involvement in decision making) to increase motivation, ownership and thereby employees' contribution to achieve common goals. Their third antecedent is managerial effectiveness, as a subunit leader needs to make this unit operate according to the organization's goals. Supervisors are most effective when they provide interpersonal as well as task orientation to their subordinates and inverse, when the subordinates know what expectations are held upon them (PS fit).

Even though Beehr et al. (2009) focus on goal alignment, these antecedents can be transferred to other types of alignment. This is indicated through mentioning the different types of

person-environment fit, that Kristof-Brown et al. (2005) examined, at the appropriate places in the above frame of alignment of Beehr et al. (2009).

Regarding the measurement of alignment, Chuang et al. (2016) focus on the alignment between the person and its environment, and identified four challenging aspects mostly addressing the multidimensionality of this kind of fit. To overcome these challenges, they integrated a fit scale for the PJ, PO, PG and PS fits respectively into one Perceived Person-Environment Fit Scale. For each scale, they evaluate connected components. For PJ fit, knowledge, skills, and abilities required of the company or job characteristics were compared with the personality or interests of an individual. For PO fit, goals and values were compared. PG fit was assessed along shared values, goals and member attributes and PS fit was evaluated with regard to values, personality, work style, lifestyle and leadership style. To validate their scale, they compared their new scale's results with results gathered through traditional ways of measurement (Chuang et al., 2016). Similar instruments have been developed to assess other types of alignment e.g. IT and business strategy alignment (Khaitan and Zualkernan, 2009).

Altogether, alignment, in its various approaches, is a powerful and crucial tool for managers in every kind of business and situation. It is a fragile concept that needs careful attention, but it is clear that managers play a key role in defining, establishing, and sustaining it, as well as making use of its benefits and assess the achievements to see potential for improvement. Managers have influence on developing alignment, as they are directly responsible for communication, employee enhancement, and their own effectiveness. As alignment causes a range of benefits and success factors for a company, it is crucial for managers to know what creates and increases alignment. For example being aware of the various phenotypes of alignment existing, exactly what outcomes they influence (and to what degree), and how to estimate and measure it. As human resources, and therefore an organization's people have been recently outlined as key to success, an essential task for managers is to take care of the alignment of the people they are responsible for and their specific environment.

# 3. Method

#### 3.1 The method of tertiary analysis

To be able to provide a meaningful contribution to research on alignment of people in relation to an organizational environment in relatively short time, neither collecting qualitative data through interviews nor quantitative data through surveys would have been adequate methods. The vast majority of empirical research is done through primary data collection, and as such, there is an argument to be made that there are diminishing returns of value the more of this type of research is made within one subject. The initial empirical papers within a new field of research are more likely to have an impact on future research, rather than empirical research conducted within an already established, or saturated, subject.

While the value of single empirical studies within a field might decrease of time, this quantity of papers on a topic enables a new method called meta-analysis. Larsson (1989) reviewed several developments of this methodology. One advantage of this method is that it makes use of previous research which contributes to stronger statistics. Another advantage is that meta-analyses can overcome the limitations of primary research studies as the method can be used to compare these studies despite them using varying methods. Third, meta-analyses can further explore these empirical analyses and their presented theories across a wide range of variables, such as time, time periods, place, industries, etc. While the empirical study might explore one or a handful of observations, the meta-analyses investigate several studies all of them including one or more observations or cases (Larsson, 1989).

Another major advantage of this method, as it provides information and data about a specific topic or question across a broad section of disciplines and methods, is that it allows conclusions about the generality and significance of a certain phenomena if results are consistent (Kitchenham, 2004). In the case of inconsistency, the sources of variation can be

analyzed. It is also critical to include as much relevant material as possible (Kitchenham, 2004).

With the increasing prevalence of meta-analyses over the last few decades, a new opportunity of further systematic reviewing is apparent in a tertiary analysis, in which a comparison of the formerly conducted meta-analyses is made. As with the meta-analyses to primary empirical studies, the statistics become even stronger with the tertiary analysis, as more observations and cases are included within the study. This concept is visualized in Figure 2.

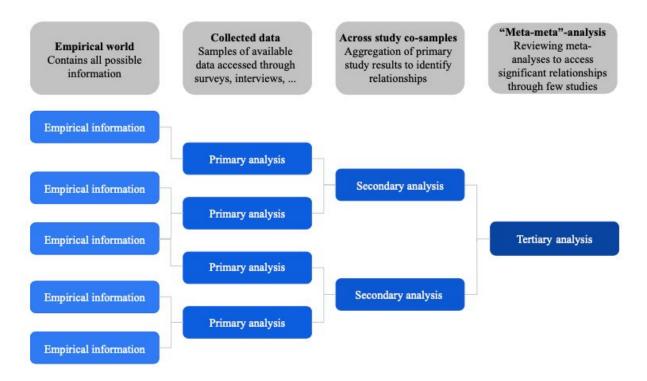


Figure 2: Steps of data collection leading to a tertiary analysis

To make use of relevant findings with significant data points, only other meta-analyses or literature reviews have been included in this thesis, leading to a tertiary analysis. In order to structure this literature review, Kitchenham's (2004) methodology was applied. Kitchenham (2004) provides clear guidelines on how to conduct a most effective literature search and evaluation that fit the purpose of this study. The described methodology has been used in various meta-analyses across different fields, leading to the conclusion that it is valid and generalizable. Even though the method was described as collecting and assessing primary research, it is transferable to the level above solemnly by limiting the literature search to only

meta-analyses. The literature review itself consists of two steps, planning the review and conduction the review (Kitchenham, 2004).

#### 3.2 Planning the Review

During Kitchenham's (2004) planning phase, on the one hand, the motivation for the research is outlined as well as the research questions developed. This has already been described previously. On the other hand, a review protocol is set up. According to Kitchenham (2004) it contains guidelines regarding (i) the search for primary data, (ii) the inclusion and exclusion criteria, (iii) the quality evaluation of the individual studies, (iv) the extraction of data and (v) the synthesis of data. Step (i) in this case is transformed into the search for secondary analyses.

For this paper, the databases LUBsearch, Web of Science, Google Scholar and Scopus were used, without restrictions regarding the year of publishing, searching for journal articles, books or conference papers by using the search words alignment, workforce alignment, fit, person, environment, match, antecedent, cause, outcome, meta-analysis, review, systematic review, research synthesis and their various combinations. The search words are derived from breaking down the research questions, looking for synonyms and feasible combinations as well as the requirement to only study meta-analyses. A first assessment of what studies to include out of the many results delivered by the search engines, was based on the requirement to be a meta-analysis, so only studies that appeared immediately by their title to fulfill this criteria were counted as a hit. The only language used was English. From this first pool, studies were excluded if they were no meta-analyses/literature reviews, when the described alignment did not contain at least one human party, or when the words alignment/fit were used to describe a different phenomena than our approach. Therefore, criteria that necessarily needed to be fulfilled were being a meta-analysis, describing alignment of at least one human side with its environment and either provide a conceptualization of alignment, link it to causes or outcomes or both.

To ensure the quality of the found studies, only peer reviewed studies were included and, if applicable, the journal they were published in was assessed using the Scientific Journal Ranking platform SJR (2020) to confirm quality. Quality was assured through the platform by collecting the number of citations in research referring back to papers from the journal, and

importance and impact in the field the journal belongs to are summarized and compared to other journals within that field (SJR, 2020). In accordance to the developed research questions, the extracted data should consist of the used conceptualization of alignment, the positioning of alignment as a dependent or independent variable, its causes (antecedents), the outcomes or consequences of alignment, how it has been measured and the time frame and location in which the data for the meta-analysis was collected. Regarding the data synthesis, a descriptive synthesis (Kitchenham, 2004) is appropriate in this case. Additionally, a quantitative summary of secondary research is provided to be able to recognize patterns.

#### 3.3 Conducting the Review

Following the review protocol, a search strategy was set up, where a first search in the mentioned databases with the above stated search words led to 28 studies published between 1993 and March 2020 that seemed feasible by their title and as a meta-analysis at first glance. The reference, title, author, name of database, date of search and URL were documented immediately to be transparent and replicable (Kitchenham, 2004).

To assess this selection, abstracts and conclusions were reviewed and studies rated along the exclusion criteria. The relevance was stated as highly relevant, relevant or not relevant, and a justification was added. 8 studies were excluded since they were no meta-analyses, 5 of them used the terms fit or alignment in a different context, and 4 articles studied alignment of two or more non-human issues. These were all labelled as having no relevance at first by this thesis' authors, but were reassured by the supervisor. Of the remaining 11 studies, 7 were ranked as relevant, as their conceptualization of fit did only appear once in this specific study (within this sample), and 4 studies were ranked as highly relevant as they covered our research questions perfectly and have been impactful in this area.

To assure the quality of these 11 studies, the journal's ranking was checked on SJR (2020). It was filtered for only peer reviewed studies in the data bases in the first place. Additionally, the amount of citations the articles had was considered. No study had to be excluded because of the quality criteria. In a second research iteration, studies that have cited at least one of the articles that were ranked as highly relevant, were assessed along the same procedure. This led to 8 additional studies that seemed to be valid regarding their title, from which 2 were no meta-analyses, and 2 were not studying alignment in the range of our definition. One article

was not accessible without a charging fee, and therefore it was excluded. From the remaining 3, 2 were ranked as highly relevant, and the last one worked exclusively on how to measure alignment. It was not included as it does not fulfill the criteria of being a meta-analysis, yet offers a comprehensive overview of how to measure alignment.

In total 13 studies are included in the tertiary analysis. An overview is given in the following figure.

36	Literature Search	Searching databases with search words or reference lists led to 28 feasible studies in the first round and 8 in the second
-11	Exclusion Criteria: no meta-analysis	11 studies were no meta-analyses
-7	Exclusion Criteria: alignment in different context	7 studies used alignment in a different context
-4	Exclusion Criteria: no people included	4 studies did not include people at least on one side
-1	Exclusion Criteria: no free access	One study was not accessible, but none were excluded due to quality
13	Studies included in this analysis	7 studies were relevant, 6 were very relevant

Figure 3: Overview of material collection process

The data extraction was guided by the in the protocol previously set topics. The articles' main finding was summarized and the used definition or conceptualization of fit/alignment was outlined, whether alignment was seen as an independent variable causing outcomes or consequences, or a dependent variable influenced and/or caused by something else. The antecedents, as well as the described outcomes or consequences of alignment, were investigated. The way of measuring alignment/fit was examined and attention was paid to the time period and country in which the in the meta-analyses used data was collected. The data extraction of the 6 highly relevant ranked studies was done by both authors, the 7 remaining ones were divided up and the collected information discussed.

#### 3.4 Limitations of the method

Limits within this review, that mostly occurred due to the relatively small time frame, were especially related to the search strategy. Firstly, only English was used as search language, shrinking the width of the field. On the other hand, this prevents a decrease in quality due to translation errors. Secondly, non-peer reviewed work, as well as unpublished or lower quality journals, were excluded quite early within the research process. This should not exclude most relevant work. Thirdly, there is a threat of biases in regards as to which papers seem feasible in the first place, e.g. their titles. Positive results are more likely to be published than negative ones (Kitchenham, 2004), and the fact that only positive associated search words were used (alignment instead of misalignment for example) might increase this effect. Still, even if the analyzed meta-analyses investigated the (positive) effects that alignment can have, if there was no presented evidence in some kind of correlation, this was an obvious finding as well.

# 4. Data analysis

In the final step of Kitchenham's (2004) guideline to conduct the review, the collected data is synthesized. As mentioned above, a descriptive synthesis presents the, for our research questions, important information in the best way. Therefore, the results of the included meta-analyses are summarized to identify similarities and differences and to allow statements about the homogeneity or heterogeneity of the results of different studies. In detail, information was collected about the amount of studied articles, their publication years, the countries of data collection, the meta-analysis' main finding, its definition of alignment, whether alignment is dependent or independent, which causes/antecedents or outcomes/consequences are analyzed and its measurement. A quantitative summary is presented in subchapter 4.3.

### 4.1 Overview of qualitative literature synthesis

To facilitate the demonstration of the extracted information, the main characteristics of each study are summarized in table 1. The studies are listed in chronological order.

Table 1: Overview qualitative synthesis

Title	Authors	Year (Ranking)*	Time period /countries reviewed	Conceptualization/ Definition**	Independent /dependent variable	Causes**	Outcomes**	Measures**
A meta-analysis of relations between person-organization fit and work attitudes	Verquer et al.	2003 (4)	1967-2002 /n.a.	Alignment as PO fit as compatibility between people and organizations a) when one provides what the other needs (complementary congruence) b) they show similar basic characteristics (supplementary congruence) or c) both	Independent	-	Job satisfaction Organizational commitment Intent to turnover	Measuring discrepancies: Direct, perceived or subjective fit; Indirect, objective fit; Hierarchical order of measurements; Organizational Culture Profil questionnaire
Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit	Kristof- Brown et al.	2005 (1)	1969-2005 /n.a.	Alignment as PE fit defined by the compatibility between an individual and a work environment that occurs when their characteristics are well matched; PV, PJ, PO, PG, PS; complementary (needs-supplies or demands-abilities) and supplementary fit	Independent	-	Applicant attraction Job acceptance Intent to hire Job offer Satisfaction Commitment Performance Withdrawal behavior Strain Tenure	Direct, perceived fit; Indirect, subjective or objective fit

Applicant attraction to organizations and job choice: A meta-analytic review of the correlates of recruiting outcomes	Chapman et al.	2005 (9)	1976-2002 /n.a.	Alignment as fit between a person and the organization and the job, a demands-supplies relationship	Independent	-	Job pursuit intention Job-organization attraction Acceptance intention	Direct, determined by the applicant by interpreting the characteristics of the job and organization with regard to own values and needs
A quantitative review of the relationship between person–organization fit and behavioral outcomes	Hoffman and Woehr	2006 (5)	1989-2002 /n.a.	Alignment as PO fit, defined by congruence of characteristics of individuals with characteristics of the organization; Either value- or goal-congruence, or demands-abilities relationship	Independent	-	Job performance Organizational Citizenship Behavior (OCB) Turnover	Measuring discrepancies: Direct, perceived or subjective fit; Indirect, objective fit
The effects of the perceived behavioral integrity of managers on employee attitudes: A meta-analysis	Davis and Rothstein	2006 (12)	1990-2003 /no effects	Alignment as behavioral integrity (BI), alignment of a person's words and deeds	Independent	-	Satisfaction Commitment Affection	Direct (Perceived Leadership Integrity Scale)
The relationship between person-environment fit and outcomes: An integrative theoretical framework	Edwards and Shipp	2007 (6)	1954-2005 /n.a.	Alignment as PE fit as the congruence, match, similarity or correspondence between the person and the environment; supplementary or complementary (demands-abilities or needs-supplies) fit	Independent	-	Job satisfaction Organizational commitment Mental and physical health Task performance Contextual performance	Direct, surveys
Person-environment fit or person plus environment: A meta-analysis of studies using polynomial regression analysis	Yang, et al.	2008 (8)	1994-2007 /USA; no effects	Person, defined by individual characteristics; Environment, defined by characteristics of the setting; Alignment as complementary or supplementary fit; PG, PO, PV, PJ, PS	Independent	-	Well-being Task performance Contextual performance (OCB)	Direct, perceived fit; Indirect, combining different independent measures
Fit happens globally: A meta-analytic comparison of the relationships of person-environment fit dimensions with work attitudes and performance across east asia, europe, and north america	Oh et al.	2014 (3)	1992-2012 /East Asia, Europe, North America; effects	Person, defined by individual knowledge, skills, abilities, personality, values and interests Environment, defined by characteristics external to the individual; Alignment as PJ, PO, PS, PG	Independent	-	Organizational commitment Job satisfaction Intent to quit Job performance	-
How leader alignment of words and deeds affects followers: A meta-analysis of behavioral integrity research	Simons et al.	2015 (11)	1990-2014 /n.a.	Alignment as behavioral integrity (BI), alignment of a person's words and deeds	Independent	-	Performance Trust Organizational Citizenship Behavior (OCB) Commitment	-
The general factor of personality and job performance: Revisiting previous meta-analyses	Pelt et al.	2017 (7)	2001-2011 /n.a.	Alignment between the individual's personal traits (GFP) and its social environment	Independent	-	Job performance Organizational Citizenship Behavior (OCB) Leadership performance	-
Person–Environment Fit: A Review of Its Basic Tenets	Van Vianen	2018 (2)	1995-2017 /n.a.	Alignment as complementary (PV, PJ) and supplementary (PO, PG, PS) fit	Independent	-	Satisfaction Performance Commitment Intent to quit	Direct, perceived fit; Indirect, calculated fit (subjective or objective)
Outcomes of meaningful work: A meta-Analysis	Allan et al.	2019 (10)	1997-2016 /Western Context (USA, Europe); effects	Alignment of a person's own values and the merit he/she accomplishes during work, between the job's characteristics and personal identity	Independent	-	Work engagement Commitment Job satisfaction Withdrawal intentions Organizational Citizenship Behavior (OCB) Life satisfaction Life meaning General health	-
Measuring team trust: A critical and meta-analytical review	Feitosa et al.	2020 (13)	1981-2015 /n.a.	Alignment of team members regarding their state in the dynamic process of developing trust	Independent	-	Performance	Direct, through single- or different-source assessment

<sup>\*</sup> the number in brackets indicated the study's place in our ranking of relevance (1 - most relevant to 13 - least relevant)

<sup>\*\*</sup> of alignment

## 4.2 Detailed qualitative literature synthesis

In this section, a detailed summary of each included meta-analysis is provided. The meta-analyses are listed according to their relevance regarding their contribution to the research questions.

#### Feitosa et al. (2020)

Feitosa et al. (2020) investigate the concept of team trust and the relationship between trust and performance of teams. They included 118 studies in their meta-analysis from between 1981 and 2015, with the majority of the research used published after 2000, and there is no attention paid to which region or country the primary data was collected in. They put an additional focus on how team trust is measured and how the mean of measurement influences the outcomes regarding the trust-performance relationship. Time (trust and performance measured at the same time vs. measured with time lag) and source (single-source vs. different-source studies) were identified as moderators, whereas the alignment of conceptualization and operationalization of team trust and the referent of team trust ("I…" or "We…") did not influence the outcomes.

Team trust is defined as an emergent, multidimensional and shared team property consisting of an cognitive component and an affective component. The former refers to the individual expectations of team members, the latter to the willingness to emotionally invest in the team. As trust is defined as a shared and dynamic concept that can change with interaction between team members, this definition allows an interpretation of the level of team trust as alignment between team members regarding their state in this dynamic process.

Trust was measured through different scales in the included primary research. Therefore Feitosa et al. (2020) suggest three measurement guides. First, to avoid response biases, using scales that cover both cognitive and affective components and avoid extreme wording. Second, as trust is an emergent construct, the team's lifespan needs to be taken into consideration. Third, the dimensioning of team performance (specific or global) can influence the importance of trust on team performance. Team trust is seen as independent, impacting the overall team performance.

#### Davis and Rothstein (2006) and Simons et al. (2015)

Another rather unique conceptualization of alignment was meta-analyzed by Davis and Rothstein (2006) and Simons et al. (2015). Both examine the alignment between managers' words and deeds, called behavioral integrity (BI) and its influence on followers and employees respectively.

The earlier work focuses on employees' perception of alignment between their managers' words and deeds in relation to their job and leader satisfaction, and commitment and affect towards the organization. Only 12 studies between 1990 and 2003 were analyzed, yet they indicated a strong relation between BI and employees' attitudes. The authors outline that the country where data was collected did not have a moderating effect on this relationship. According to Davis and Rothstein's (2006) definition, BI includes the alignment of ethical words spoken and what is done. This also covers the expectations on managers and whether their actions and behavior as well as personal statements are in line with the organization's mission. BI influences as independent variable employees' attitudes that reflect individual's connection to their work, such as satisfaction, commitment and affection.

Simons et al. (2015) analyzed 136 studies from 1990 until 2014, where, again, most of them were published more recently. They do not mention which regions or countries the data was collected in. Their definition of BI equals the one from Davis and Rothstein (2006), yet their focus lies in the comparison of BI with two other concepts, namely moral integrity and psychological contract breach, regarding their influence on performance, trust and commitment of followers. They conclude that BI has stronger impact on performance, organizational citizenship behavior (OCB), and trust, rather than moral integrity, and stronger impact on commitment and citizenship behavior than psychological contract breach. BI is seen as independent variable, affecting the three mentioned attributes. Both studies did not elaborate further on how BI can be measured than mentioning the Perceived Leadership Integrity Scale (Davis and Rothstein, 2006).

#### *Allan et al. (2019)*

Allan et al. (2019) conducted a meta-analysis using 44 studies published between 1997 and 2016, most of them after 2010, to investigate the relationship between meaningful work and

outcomes as work engagement, commitment, job satisfaction and withdrawal intentions. They also paid attention to outcomes such as life satisfaction, life meaning and general health. In fact, high correlation between meaningful work and these outcomes was evident. Moderate correlation was also found regarding organizational citizenship behavior (OCB), self-rated job performance or negative affect. Data was mainly collected in the United States, followed by other western countries such as Denmark, Canada, Australia, Germany, New Zealand, United Kingdom and France. Single studies from South Africa, Malaysia, Israel, China and Turkey were included. As meaningful work is described as a process of meaningful experiences that are individual, the study's results can only be generalized within a western context. Allan et al. (2019) define meaningful work as "global judgement that one's work accomplishes significant, valuable, or worthwhile goals that are congruent work with one's existential values" (Allen et al., 2019, p. 502). In a broader sense, this can be seen as a conceptualization of alignment, namely between a person's own values and the merit he/she accomplishes during work.

The alignment of job characteristics and tasks with individual values and personal identity equals the degree of meaningful work experienced (Allan et al., 2019). The authors see this alignment as an independent variable, taking influence on various outcomes in various degrees. These can be divided in proximal outcomes (work engagement, job satisfaction and commitment), distal work related outcomes (self-rated job performance, OCB and withdrawal intention) and distal wellbeing outcomes (life satisfaction, negative affect and general health). Meaningful work may also contribute to a higher meaning in life, among many other components. Two types of scales, significance and multidimensional scales are mentioned, yet apart from their possible role as moderator, the exact way of measure meaningfulness is not mentioned.

#### Chapman et al. (2005)

Another meta-analysis, including 71 studies from 1976 until 2002, investigated the relationship between applicant attraction and job choice. The regions or countries in which the data was collected were not outlined in the analysis. Chapman et al. (2005) concluded that "applicant attraction outcomes were predicted by job—organization characteristics, recruiter behaviors, perceptions of the recruiting process, perceived fit, and hiring expectancies"

(Chapman et al., 2005, p. 928). From an inverse perspective, among other concepts, the perceived fit influences applicant attraction. Fit with the organization, as well as fit with the type of job offered, needs to be determined by the applicant, which is done through interpreting the characteristics of the job and organization with regard to their own values and needs. The perceived fit results from a demand-supply relationship (Chapman et al., 2005).

As fit is categorized as a predictor in this study, it is studied as an independent variable, having an impact on recruiting outcomes, namely job pursuit intention, job-organization attraction and acceptance intention. Apart from mentioning that applicants need to interpret features of the job/organization considering their own values, measurement of perceived fit is not described.

#### Yang et al. (2008)

Yang et al. (2008) studied in their meta-analysis of 25 articles from 1994 to 2007 the nonlinear terms of polynomial regression analysis (PRA) to explain variance in assumed outcomes of person-environment (PE) fit. Linear terms in the regression equation represent the person's attributes and the environment's attributes separately from another, whereas only the nonlinear components describe the actual fit. Therefore, it is examined if the additive composite of P and E is enough to predict outcomes or if their fit influences them as well. The authors conclude that when used in appropriate scenarios to investigate human resource management topics, such as PE fit, PRA could potentially be effective. The sources of the samples were found mainly the United States. However, the authors conclude that there was no moderating effect of country observable.

To define PE fit they start with persons, defined by their individual characteristics such as abilities, skills, knowledge, preferences, etc. and environment by referring to characteristics of the setting such as rewards structure, autonomy available at work or the other individuals in this environment. To assess both, they suggest to use the same basic dimensions, as autonomy, for example. Fit is also defined separately as either supplementary fit or complementary fit. The former refers to situations where the individual's traits are similar to other individuals in the environment, the latter occurs when the person either fills a gap in the environment or the environment fulfills a person's individual need.

The authors also point out that PE fit can be seen as a multi-levelled concept. Considering person-group fit and person-organization fit, supplementary fit, as well as complementary fit, can be beneficial. Regarding person-vocation or person-job fit, and person-supervisor, as well as person-coworker fit, mostly supplementary fit seems to result in positive outcomes. Evidently, fit is studied as independent variable leading to positive employee well-being, better task performance and more contextual performance, such as OCB.

Yang et al. (2008) also provide an overview of how PE fit can be measured. Direct measures lead through asking individuals and individual judgement to measures of perceived fit. This can be criticized because independent effects of persons and environment are easily mixed with dependent when assess by the same person at the same time, and the outcomes are biased by subjective perception. Indirect assessments overcome these shortcomings by combining two or more independent measurements into one index. These measures then become rather mathematical, starting by using algebraic differences, for example between actual and desired job attributes to assess fit, up to more advanced mathematical concept to analyze variances.

#### *Pelt et al. (2017)*

Pelt et al. (2017) conducted a tertiary analysis on 7 meta-analyses published between 2001 and 2011 to examine the relationship between the General Factor of Personality (GFP) and job performance, OCB, and leadership performance. The countries where data was collected were not mentioned. The GFP incorporates several correlating personality traits. There are strong relationships between GFP and the mentioned outcomes, especially in comparison to any other of the "Big Five" dimensions which are: openness to experience, conscientiousness, extraversion, agreeableness, and emotional stability. Scoring high on the GFP indicated that the individual is socially effective and shows socially desirable behavior, meaning that there is a general fit between the individual's personal traits and its social environment leading to the ability to use this social intelligence to increase performance. Therefore, this conceptualization of fit is seen as independent variable. How the fit between personality and social environment can be measured is not explained.

#### Edwards and Shipp (2007)

Edwards and Shipp (2007) developed a theoretical framework to conceptualize person-environment fit (PE) in connection with different outcomes. They examined studies from 1954 until 2005 to be able to present an integrative theoretical model of PE fit but also to enable future researchers to probe their approach to PE fit with regard to their basic assumptions, the levels of fit and how these influence the possible outcomes. The countries in which the data was collected from were not mentioned. They conceptualize PE fit as "the congruence, match, similarity or correspondence between the person and the environment" (Edwards and Shipp, 2007, p. 213). Also, they distinguish between supplementary and complementary (demands-abilities or needs-supplies) fit. The level of the environment is connected to this distinguishment as according to the authors, with regards to supplementary fit, the environment is conceptualized as other people, like supervisors or coworkers, but also team or the whole organization. For complementary fit, for example, the demands of a certain job are what is conceptualized as environment. Whether fit is examined on a global, domain or facet level is a third differentiation regarding fit.

With this conceptualization the authors also outline how the different approaches influence outcomes, therefore, fit is clearly studied as independent variable. Outcomes they investigate are divided into three groups regarding attitude (job satisfaction and organizational commitment), mental and physical health (stress) and task and contextual performance. Edwards and Shipp (2007) also outline that when measuring fit, attention needs to be paid to examine both parties within the same dimensions, yet also only mention surveys as concrete measurement.

#### Hoffman and Woehr (2006)

Hoffman and Woehr (2006) analyzed, in their meta-analysis of 24 studies from the years 1989 to 2002, the relationship between person-organization fit and behavioral criteria, such as job performance, OCB and turnover. Geographical region of where the data was collected is not specified. The results indicated moderate correlation that is strongly moderated by the measure of fit and only weak by the definition of fit. PO fit is defined as the congruence of certain characteristics of individuals with characteristics of the organization. This congruence can refer to value- or goal-congruence, or demands-abilities fit. As the influence of PO fit on

behavioral criteria is examined, alignment of the person and the organization is studied as an independent variable.

The authors refer to three approaches to measure PO fit that Verquer et al. (2003) originally outlined: subjective, perceived and objective fit. All three categories have in common that they assess discrepancies between the characteristics.

#### Verquer et al. (2003)

One of the early meta-analysis in this field was conducted by Verquer et al. (2003). They reviewed 21 studies from 1967 to 2002 to assess the relationship of person-organization fit and job satisfaction, organizational commitment and intent to turnover, as well as the influence of moderators. Examples of these moderators are: type of fit measure, method of calculating fit, dimension of fit and the usage of an established measurement method. Information about the sample sources of the included primary data is given, yet there is no focus on country or region specific issues. PO fit is conceptualized as compatibility between people and organizations that occurs when one provides what the other needs (complementary congruence), when they show similar basic characteristics (supplementary congruence) or both. It is further stated, that PO fit influences a person's behavior and is thus studied as independent variable. Outcomes investigated are job satisfaction, organizational commitment and intent to turnover.

Regarding measurements of PO fit, subjective, perceived and objective fit are outlined. Subjective fit is measured by directly asking individuals how their characteristics fit with the organization's through self-reporting. Perceived fit is evaluated by firstly asking individuals to describe themselves and their characteristics and the ones of the organization by questionnaires and secondly measuring fit through calculating discrepancies. Objective fit asks one individual to describe themselves, and then other members of the same organization about their characteristics. This is done in order to be able to develop an indicator for the organization's climate and then analyze the congruence between the individual's self-description and the accumulated organizational profile.

Next to calculating discrepancies from absolute scores, fit can also be evaluated by looking at the hierarchical order of measurements that represents their importance more accurate. As an established method to measure fit, the authors mention the Organizational Culture Profile questionnaire (OCP).

#### *Oh et al. (2014)*

Fit is a global human concept, yet it gives room for various interpretations, as Oh et al. (2014) investigated in their meta-analysis. The analysis included a total of 96 studies between 1992 and 2012. They looked at person-environment fit (PE) in the four dimensions of person-job (PJ), person-organization (PO), person-group (PG) and person-supervisor (PS) in relation to their influence on work attitudes (organizational commitment, job satisfaction, and intent to quit) and job performance in the regions East Asia, Europe and North America. Results stated that effects of PO and PJ fit are stronger in North America, and PG and PS fit in East Asia, indicating a connection with different power distance cultures.

The authors start by defining the person through individual knowledge, skills, abilities, personality, values and interests and the environment through "characteristics external to the individual such as job characteristics (e.g., challenge and autonomy) and the organization (e.g., values or pay structure)" (Oh et al., 2014, p. 103). PG and PS fit are grouped to describe the relational or interpersonal aspects of work and PJ and PO fit the rational or impersonal aspects. Therefore, fit in general is studied as independent variable influencing employees attitude and performance. Fit itself is not measured.

#### Van Vianen (2018)

Van Vianen (2018) reviewed 42 studies published between 1995 and 2017 (countries neglected) to provide an overview on research using polynomial regression in order to examine fit-outcome relationships and to test three underlying principles regarding PE fit theory. The three principles are: that fit predicts human behavior better that each entity's characteristics separately, that outcomes are optimal when attributes are compatible irrespectively of their relative ranking, and that the direction of misfit does not matter. Van Vianen (2018) separates complementary (person-vocation and person-job fit) and supplementary fits (person-organization, person-team and person-supervisor fit) that each influence outcomes differently.

Influenced outcomes are satisfaction, performance, commitment and intention to quit, on different levels. Fit is therefore considered as independent variable. The author proposes two approaches to measure fit, perceived fit and calculated fit (either subjective or objective).

#### *Kristof-Brown et al. (2005)*

The most inclusive meta-analysis on alignment/fit was conducted by Kristof-Brown et al. (2005) analyzing 172 studies published between 1969 and 2005. In this expansive study, no specific attention was paid to where primary data was collected. The authors differentiate types of person-environment fit (PE) and analyzed their relationship with pre entry and post entry individual-level criteria, concluding that there is a broad generalizability of this construct. Fit is defined as "the compatibility between an individual and a work environment that occurs when their characteristics are well matched" (Kristof-Brown et al., 2005, p. 281).

As this is a very simplified and broad characterization, the authors use different types of fit that are explained as follows. Person-vocation fit (PV) describes the match between people's interests and their career. Person-job (PJ) fit is defined more narrowly, focusing on the fit between a person's characteristics and those of the tasks that need to be performed. This fit can either be seen as a demands-abilities or a needs-supplies relationship. Person-organization (PO) fit is defined as either value or goal congruence between the individual's and the organization's ones. Person-group fit (PG), or person-team fit, focuses on the psychological compatibility between individuals with regard to values, goals but also personality traits. Finally, person-supervisor fit (PS) examines the dyadic fit between supervisors and their subordinates. In this case, the supervisor represent the environment and the match of values, goals and personality is studied. Fit on the one hand is conceptualized as complementary, where an individual's skills provide what the environment lacks or the other way round. This can be described as demands-abilities or needs-supplies relationship and is highly present in PJ fit theory. On the other hand it can be conceptualized as supplementary fit, where individuals and the environment are similar. The way fit is conceptualized influences its impact on different criteria.

When describing and assessing fit, it is vital to pay attention to the dimensions of fit that are measured for each entity as they need to be commensurate. Kristof-Brown et al. (2005) elaborate on how to measure fit and distinguish between direct and indirect assessment. When

fit is assessed directly, the result is an individual's perceived fit as the person directly describes the compatibility between them and the environment. Indirect assessment is divided up into subjective fit, where a single person describes itself and then the environment and objective fit, where the two entities are described through different sources. Fit or alignment in this case is again seen as independent variable influencing pre entry criteria such as applicant attraction, job acceptance, intent to hire and job offer as well as post entry criteria like attitudes, performance, withdrawal behavior, strain and tenure.

#### 4.3 Quantitative summary

In order to facilitate a quantitative summary of studies on the same causes, outcomes and conceptualization of alignment, it is referred back to the summary in table 1.

#### Quantitative summary of conceptualizations

The majority of meta-analyses on alignment or fit define the concept in general as the compatibility between an individual and its environment (Chapman et al., 2005; Yang et al., 2008; Edwards and Shipp, 2007; Hoffman and Woehr, 2006; Verquer et al., 2003; Oh et al., 2014; Van Vianen, 2018 and Kristof-Brown et al., 2005). Yet, how this compatibility is expressed, varies. Many authors start with conceptualizing person-environment fit (PE) and then approach it via different angles and different types of fit. Still, when summarized quantitatively, patterns are recognizable.

Table 2: Summary of conceptualizations of alignment

Conceptualization of alignment	Quantity of studies
Alignment of team members regarding the development of trust	1
Alignment as behavioral integrity (BI)	2
Alignment between personal traits and social environment	1
Alignment between person and job (PJ)	6
Alignment between person and vocation (PV)	3
Alignment between person and organization (PO)	7
Alignment between person and group (team) (PG)	4
Alignment between person and supervisor (PS)	4
Alignment between person and environment (PE)	8
Alignment as supplementary fit (value- or goal congruence)	8
Alignment as complementary fit (demands-abilities or needs-supplies relationship)	8

As outlined above, alignment is primary conceptualized as the fit between the individual and its environment. Just as often, authors mention supplementary and complementary fit. Supplementary fit is defined as similarity between the individual and the environment, and complementary fit is when the individual fills a gap in the environment for example through its unique skills (Kristof-Brown et al., 2005). There are studies that approach fit only as either supplementary (Allan et al., 2019) or complementary (Chapman et al., 2005). When breaking up the dimensions of the "environment", the type of alignment that is examined the most is between the person and the organization, followed by the person-job alignment. PS, PG and PV fit are analyzed in 4, respectively 3, studies.

#### Quantitative summary of (in)dependent view on alignment

All investigated meta-analyses analyzed alignment primarily as an independent variable and assessed its relationship with different possible outcomes. None of them examined on what causes alignment in the first place and how it can be created, improved or increased.

#### Quantitative summary of causes/antecedents

As all studies treated alignment as independent variable, no explicit causes of alignment have been specified.

## Quantitative summary of outcomes/consequences

The studied meta-analyses all focussed on the relationship between alignment and beneficial outcomes.

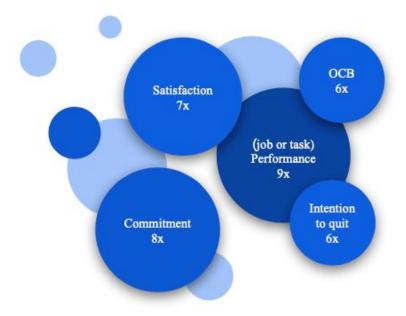


Figure 4: Outcomes of alignment

The most studied outcomes were job performance, organizational commitment, job satisfaction, contextual performance or OCB and intention to quit (see table 1). Three studies examined the relationship of alignment and health. Well-being, engagement, job acceptance and organization attractivity were connected with alignment in two studies each, and trust, leadership performance and job offer only once each.

#### Quantitative summary of measurements

When ways of how to measure alignment were mentioned (9 of 13 meta-analyses), there was mostly distinguished between direct and indirect measures, yet this only refers to the source of data. All measurements are accomplished through primary data collection.

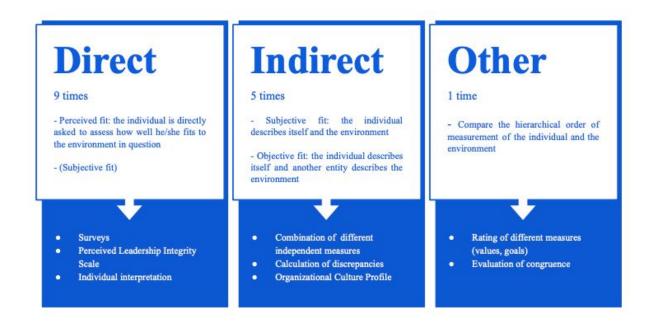


Figure 5: Measurements of alignment

It is further subclassified between perceived, subjective and objective fit, yet their definitions differ among the meta-analyses. According to Kristof-Brown et al. (2005) perceived fit is measured when the individual directly rates how well it perceives to fit into a specified environment. Subjective and objective fit are retrieved through asking either one individual to describe its own characteristics and then the environment's ones, or the environment is described by another entity. In both cases fit is indirectly calculated by examining discrepancies. Verquer et al. (2003) switch the definition of subjective and perceived fit.

#### Quantitative summary of time periods covered

The following graph shows each meta-analysis included in this tertiary analysis by the year it was published on the Y-axis, and the time period between the first study it included and the last one on the X-axis. Likely, they will not have included every study on alignment published in that interval with respect to their own exclusion criteria. The color indicates whether the study was ranked relevant (light blue) or highly relevant (dark blue) when evaluated during the literature review.

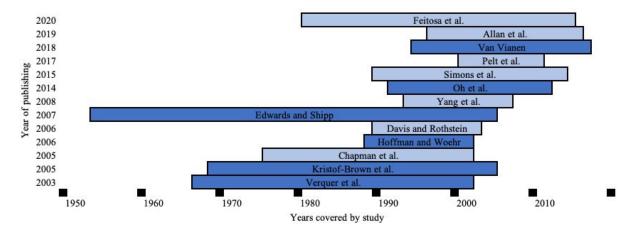


Figure 6: Time intervals covered by each study respectively

With regards to the reviewed studies in this tertiary analysis, it is noticeable that they are all relatively recently published, the earliest one in 2003. Concerning the time period they cover, the maximum amount of years was 51, the minimum 10, yet this is with regards to the publishing year of primary research that was included. To examine when these primary studies collected their data, is beyond the scope of this study. On average the meta-analyses covered a period of 25 years.

#### Quantitative summary of country specific findings

Regarding the specification of countries in which primary data was collected, the majority of analyzed meta-analyses mostly neglected that aspect. Nine out of the 13 studies did not mention the regional origin of their data at all.

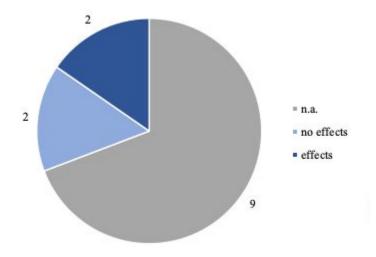


Figure 7: Amount of studies indicating (no) effects of country

From the remaining four, two studies mentioned countries, yet they immediately stated that the country, where data was collected in, did not influence the outcomes. Davis and Rothstein (2006) studied behavioral integrity, and its relation with employees' attitudes was not influenced by country. When assessing the role of nonlinear terms in polynomial regression analysis, Yang et al. (2008) also concluded that country had no moderating effect.

Allan et al. (2019) are the only ones that in detail outlined the country their primary data was collected in, which were mostly western countries. They used this information to raise awareness that their findings on meaningful work might only be generalizable in a western context. Oh et al. (2014) explicitly evaluated fit in different cultural contexts and clearly outlined moderating effects of country with regard to fit and its connection to power distance.

## 5. Discussion

The gathered observations lead to valuable insights regarding the focus of existing meta-analyses on the alignment of people. The results concerning the conceptualization of alignment, whether it is seen dependently and caused by something or independently influencing other aspects, its specific causes and outcomes, and how it can be measured, are discussed and interpreted in the following. Also, the impact of the point in time when data was collected and its geographic origin is considered.

#### Conceptualizations

The conceptualizations of alignment/fit in the studies analyzed, as mentioned in the quantitative summary, vary, but not to a degree that leads to contradictions between the definitions. The different conceptualizations can be interpreted as quite homogenous, as most of them start with person-environment fit (PE), and then break the concept down to one or two of the five dimensions that appear to be agreed upon in the doctrine. This indicates that there seems to be an implicit consensus on what the definitions are.

#### Antecedents and outcomes

It was further investigated whether literature on alignment of people analyzes the concept as dependent and therefore describes how alignment itself can be created, developed or influenced in any direction, or as independent variable, creating and influencing various outcomes itself. The obvious answer to this with regard to the examined meta-analyses is that all studies primarily examined the relationship between alignment and positive outcomes.

As this finding was striking, a brief re-assessment of all included studies was done with an explicit focus on if they mention any antecedents or factors that contribute to the degree of alignment. As alignment was conceptualized in the majority of studies either as similarity concerning values, goals or personal traits or as demands-abilities/ needs-supplies

relationship, this gives clues how antecedents can be deduced. As Beehr et al. (2009) outline, communication, enhancement and managerial effectiveness are key factors to develop and sustain alignment.

With this in mind, clear communication between the environment and the individual can be recognized as an antecedent of alignment. When goals, values, and needs of both parties are known by the other side, it is easier for both to be responsive and empathic. In this context, feedback is an important construct as it ensures the continuous joint effort towards the same aim. Especially regarding complementary alignment, employee enhancement is another factor that can increase fit or alignment. Through coaching, clarification of expectations and active integration in processes like decision making and role development, individuals can be shaped towards the needs of the environment and the other way round. Lastly, management and leadership is crucial for the development of alignment specifically with a broader environment like an organization. When one's leader is committed to certain goals and values, it is likely that oneself as follower will be aligned with them as well.

One can say, that antecedents of alignment can be as diverse as the conceptualizations of alignment itself, each best created and influenced by a unique mix of factors. Nevertheless, it is worth diving deeper into this subject, as alignment of people is a crucial success factor. A frame or guideline that supports the establishment and sustainability of alignment would be beneficial for the majority of organizations. Therefore, further research in this topic is necessary to firstly outline influential components and secondly combine them into a useful tool to assist the persons in charge.

The area of possible positive outcomes of alignment is instead very well researched and various attributes of successful organizational life have been connected to it. Referring back to the quantitative summary of examined outcomes, performance, satisfaction and commitment have been identified and even health issues are correlated to the presence of alignment.

Not denying any of these beneficial outcomes, it is worth noticing that none of the investigated studies had a more critical view on alignment. It is said, that everything can be poison in the wrong dose, therefore, further research if there is any possibility that negative outcomes are correlated or if too much alignment can even backfire, is necessary. Kathuria et

al. (2007) start with this thought experiment, as they argue that too tight alignment can create a lack of flexibility in a company's fast changing environment. A certain degree of non-alignment might even enhance constructive discussion and communication and create an atmosphere where new ideas and approaches might be developed. Surely, thinking about critical implications of alignment and the possible benefits of its lack should be a future path in this research area as well.

#### Measurements

Another important aspect in the field of alignment is how it can be measured. Different approaches on how to do so have been described. Primarily there was distinguished between perceived, subjective and objective fit. However, even in this relatively small sample of studies there have already been discrepancies between their definition.

One of the three mentioned definitions of how to measure alignment is that individuals are directly asked to evaluate how well they fit with their environment. Verquer et al. (2003) refer to this as subjective fit, whereas Van Vianen (2018) and Kristof-Brown et al. (2005) name it perceived fit. Verquer et al. (2003) use the term perceived fit for the method to firstly ask an individual to describe itself and then characterize the environment and secondly calculate and rate discrepancies between those answers. Van Vianen (2018) and Kristof-Brown et al. (2005) list this definition under the category of calculated fit that can either be subjective or objective, therefore for them, this is subjective fit. All parties agree that objective fit describes the measurement when the individual describes itself and the environment is characterized by a second source. Also in this case, discrepancies are analyzed.

All these measures of alignment base on primary collected data that can vary between samples and lack generalizability. There exist various survey frames and scales that are not united regarding content and execution. To provide reliable ways to measure alignment, consistent definitions are required as well as a more robust approach to collect necessary data. Additionally, further investigation if a general theoretical frame to assess alignment can be provided is necessary.

#### Time period covered

One variable that is noticeably absent from the research presented in the meta-analyses, is time. People, organizations and environments have a tendency to be affected by external events that occur over time. None of the research explored events that might have an impact on alignment such as wars, recesses, crises etc. While most of the data that was collected for the meta-analyses are from arguably stable times in history, the analysis by Edwards and Shipp (2007), which covers a timespan of 51 years, shines in its absence of not taking the time aspect into account. This could mean that the data collected is skewed, where the presented variables could have been affected over time by different happenings or cultural changes.

Just as alignment in an organization can change over time, the perception of the phenomena of alignment can change over time. Data collected from sources which have decades spanning between their conceptions are likely to present, to some degree, alternative views and values of alignment. While the meta-analyses are made with other, specified purposes and research questions, the time aspect is very rarely mentioned at all.

#### Country specific findings

Another mostly neglected aspect is in which countries or regions the data was collected in and their influence on the respective results. It is one of the benefits of conducting a meta-analysis to have the opportunity to gather data samples from different regions and thereby gain a global view on a certain topic, in this case on alignment of people. As this fit depends very much on personal traits and characteristics, it would be expected that there are variations among different cultures. Allan et al. (2019) point this out in their suggestion for further research, and Oh et al. (2014) base their hypotheses and questions on this diversity. However, these are only two out of 13 studies that raise this issue.

It is undeniable that alignment is a global concept (Oh et al., 2014), and as managers often work in a global context, it is important to gain knowledge about how alignment of people emerges and what role it plays in different cultural situations. Future meta-analyses on the topic of alignment should pay attention whether or not regions and countries influence alignment and in what way. As Allan et al. (2019) state, when assessed data is collected in a cultural homogeneous region, it is not identically applicable to alignment in other cultures.

#### Summary of discussion

Finally, the above discussion enables framing the field of people alignment in a theoretical way, outlining the main findings of this study as well as the identification of areas that need further research and clarification.

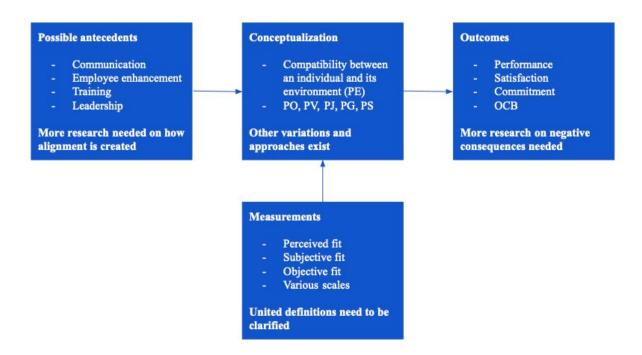


Figure 7: Overview of results

# 6. Conclusion

#### 6.1 Relevance and contribution

This tertiary analysis of 13 meta-analyses examines how the alignment of people has been framed in existing literature with a focus on its conceptualization, what causes alignment in the first place, and what it influences as independent variable. Further, it was investigated how alignment can be measured.

Incorporating various studies in this analysis shed light on alignment from different angles and enabled the integration of the most present concepts into a theoretical frame. Nevertheless, even though there has been done a lot of research on the topic, when developing this theoretical scheme, gaps within previously conducted research became apparent. Identifying these gaps has revealed new areas that require further investigation and contribute to the development of the understanding of alignment. Additionally, the method of tertiary analysis was explored and evaluated as relevant and useful, especially when applied in a well examined area of research, that already provides a substantial amount of primary and secondary analyses.

#### 6.2 Limitations and future research

While this thesis analyzes a large compilation of collected data, the research is not without its limitations. It is evident that one such limitation is the selected amount of meta-analyses included in the analysis. This means that this thesis might be presenting an alternative finding as to if more meta-analyses were included. Patterns, definitions, and other findings could be missing, and thus the results could be affected.

The same can be said of the limitation of which search words were used when gathering meta-analyses and collecting data. With the use of more and varied search words, there is a possibility that the findings could be different. Certain search words could, for example, carry

connotational meanings which in turn could lead to findings focusing on matters other than what this thesis intends to research.

The tertiary analysis itself is a rather new approach to research in this field. Thus, it is likely that the techniques used to collect the data might have affected the results, and perhaps should have been been altered or substituted by other methods. While the tertiary analysis is much akin to a meta-analysis, not all the tools from that method have been used. Effect sizes, variances, and so on are not taken into account in the results of this analysis.

Several gaps in previous research have been identified that have led to limitations within this tertiary analysis. No included meta-analysis focussed on antecedents, making it difficult to identify relevant prerequisites for establishing and sustaining of alignment. Furthermore, a critical analysis of the outcomes of alignment was difficult, as mainly positive outcomes were studied in previous research, and only seldomly possible negative aspects of alignment were mentioned. Regarding the methods of measuring alignment, no consensus existed within the reviewed studies, questioning the comparability of different studies.

Finally, just as the aspect of time, time periods, and region is addressed in the discussion chapter, one limitation of the analysis presented in this thesis, is the lack of cataloguing when and where data was collected from the empirical sources for the meta-analyses. This could have the effect of meta-analyses presenting skewed findings, which in turn could affect the quality of this tertiary analysis. Future research and meta-analyses on this topic should not only take these aspects into account but need to understand their potential, as they enable a more global understanding of alignment.

## 6.3 Practical implications

Regarding the literature review process, clear guidelines helped compiling meaningful data. However, with regard to the broad nature of the concept of alignment, it is challenging to cover all aspects in the literature search. Still, the method of tertiary analysis is a great tool to scan a field of research, clarifying existing results and findings, and exposing unexplored subjects.

Nevertheless, data analysis led to relevant results regarding the field of research on alignment. Especially that the conceptualization of alignment has developed rather homogeneous,

whereas there were no clear depictions of antecedents or methods to measure alignment found. Therefore, additional research on the topic of creating and assessing alignment is suggested. Moreover, the influence of external factors on alignment seems to have been unconsciously neglected. The time, time period, and regions in which data was collected could give hints to how global events and cultural differences influence the understanding and perception of alignment. Research on these aspects would contribute to a better understanding of the underlying dynamics of alignment and impact its future application within management.

The findings of this thesis provide managers with a common base of knowledge when talking about, or handling matters concerning, alignment of people in organizations. This facilitates the formulation of goals and the development of strategies to increase alignment, and thereby gaining advantages through the beneficial outcomes of alignment. Still, the developed frame is flexible enough to be adapted to different circumstances, such as global events that might impact organizational behavior, or other external requirements like cultural differences.

We believe this thesis provides clarification of various terms in the field of alignment of people, can encourage the use of tertiary analyses to gain meaningful insights, and raises awareness of areas that require further investigation.

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\*\*References marked with two asterisks indicate studies included in the tertiary analysis

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