



Stability, Reciprocity, and Antecedent-Outcome Relations of Different Job Crafting Forms

Thea Ebert^{1,2} · Tanja Bipp¹ · Maike E. Debus³

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Abstract

Job crafting involves employees proactively changing their jobs to better suit their preferences. Recent integrative frameworks organize the multifaceted construct with superordinate factors, emphasizing the distinction between behavioral (actions to change job characteristics) and cognitive crafting (reframing one's view on the job). However, most existing job crafting literature focuses on behavioral crafting, leaving the dynamics between behavioral and cognitive crafting and their compatibility regarding antecedents and outcomes unclear. This study provides a systematic juxtaposition of behavioral and cognitive crafting forms over time, examining their stability, reciprocal influences, and their unique relations with decision-making autonomy as an antecedent and person-job fit as an outcome. It also distinguishes between approach (enlarging one's roles) and avoidance (reducing one's roles) strategies within each form. Using structural equation modeling within a longitudinal design across three measurement points ($N=284$ German employees, time lag of four weeks each), our study revealed remarkably high levels of stability in all job crafting forms. Unexpectedly, we found no support for reciprocal relationships between the crafting forms over time nor longitudinal relations with decision-making autonomy and person-job fit. In an additional latent profile analysis, we identified four distinct job crafting profiles with significant variations in used job crafting forms and their associations with person-job fit, providing further insights into the construct's interplay. Our findings seem to question the generalizability of common theoretical assumptions in the field and emphasize the importance of investigating more differentiated mechanisms of individual job crafting forms in the future.

Keywords Job crafting · Behavioral crafting · Cognitive crafting · Person-job fit · Autonomy

Both researchers and practitioners are increasingly interested in employees' ability to proactively approach obstacles and better adapt their work to their needs (Grant

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& Ashford, 2008). This perception of employees as experts in designing their own jobs embodies the principle of *job crafting* and involves adjusting their tasks, relationships, and perceptions to enhance their person-job fit and work experiences (Wrzesniewski & Dutton, 2001). Earlier theoretical models emphasized broad and generally positive effects of job crafting (Tims et al., 2016; Wrzesniewski & Dutton, 2001). Central to these benefits are the theoretical assumptions that job crafting is facilitated by autonomy and improves person-job fit, both of which are considered fundamental to well-being and workplace effectiveness (Tims et al., 2016; Wrzesniewski & Dutton, 2001).

However, recent research has begun to highlight the heterogeneity of the construct (Ebert & Bipp, 2022; Zampetakis, 2021). Frameworks like Zhang and Parker's (2019) integrative model have organized job crafting into superordinate factors, such as approach- (enlarging one's roles) versus avoidance-oriented crafting (reducing one's roles) and behavioral (altering behaviors at work) versus cognitive crafting (altering perspectives and cognitions about work). These distinctions reveal more nuanced and sometimes conflicting effects. Mainly, approach-oriented behavioral job crafting has been associated with beneficial performance and well-being outcomes, such as higher work engagement, task performance, and job satisfaction (Rudolph et al., 2017) or decreased exhaustion (Gordon et al., 2018). In contrast, avoidance crafting to date has been associated more negatively with these outcomes (Lichtenthaler & Fischbach, 2019; Rudolph et al., 2017). Also considering nonlinear and indirect effects, moderate levels of crafting social resources have been linked to reduced engagement over time (Lopper et al., 2022), while excessive approach behavioral crafting, such as seeking challenges, may also increase the risk of burnout via increased job complexity (Harju et al., 2021).

Behavioral crafting has been the longtime focus of most empirical research, offering valuable insights into its benefits and mechanisms (Oprea et al., 2019; Rudolph et al., 2017). Although cognitive crafting has received less attention, more and more studies indicate its particular effects. Evidence primarily demonstrates the potential of cognitive crafting in enhancing job meaning and identity (Wrzesniewski et al., 2013), particularly in jobs with low autonomy or skill variety (Wang et al., 2024). Further, cognitive crafting shows promising effects on employee well-being in the form of moderating and mediating links with negative and positive affect (Hommelhoff et al., 2021; Kilic & Kitapci, 2023). While some theoretical considerations and empirical studies have also examined behavioral and cognitive crafting together (Costantini, 2024; Melo et al., 2021; Zhang & Parker, 2019), further research is needed to explore their shared and distinct dynamics comprehensively. Investigating their potential reciprocal effects and their unique relations with theorized antecedents and outcomes is essential for developing a more integrated and dynamic understanding of job crafting as a whole.

In summary, the modern job crafting literature displays a heterogeneity that the general assumptions of traditional theoretical models no longer fully address. Therefore, we systematically contrast behavioral and cognitive crafting in a joint, longitudinal process. Specifically, we examine (1) their respective stability over time, (2) the strengths of their reciprocal relationships, and (3) their comparability regarding decision-making autonomy as an antecedent and person-job fit as an outcome. In

a supplemental analysis, we adopt a person-centered approach using latent profile analyses (LPA) to explore distinct combinations of crafting forms and investigate individual differences in how they are utilized together.

Our research contributes to the literature in at least three meaningful ways. First, we clarify the stability of different job crafting forms and thereby implications for stimulating them in workplace interventions (Tims et al., 2015; van Wingerden et al., 2017a). Second, we advance the understanding of reciprocal relationships (Niessen et al., 2016; Zhang & Parker, 2019), illustrating how behavioral and cognitive crafting influence each other over time. Third, we assess the general assumptions of traditional crafting models regarding whether autonomy and person-job fit are similarly linked to both crafting forms (Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001), providing a refined foundation for advancing theory and practice in the evolving field of job crafting.

Job Crafting Conceptualizations

Wrzesniewski and Dutton originally introduced job crafting as “the physical and cognitive changes individuals make in the task or relational boundaries of their work” (Wrzesniewski & Dutton, 2001, p. 179), thereby suggesting behavioral (task and relational) as well as cognitive manifestations of job crafting. In doing so, employees can “customize [the job] to fit their own sense of what the job should be” (Wrzesniewski & Dutton, 2001, p. 185) and ultimately change their work identity and enhance the meaning of their work. Building upon this framework, Tims and Bakker (2010) revisited job crafting within the well-validated Job Demands-Resources model (JD-R; Bakker & Demerouti, 2007). In their perspective, job crafters “may change their levels of job demands and job resources to align them with their abilities and preferences”, leading to desirable outcomes such as increased person-job fit and higher work engagement (Tims et al., 2012). In contrast to the original conceptualization, Tims and Bakker (2010) place less emphasis on cognitive crafting strategies.

While the two perspectives have long been considered separately despite their discrepancies, the demand for an integrated view has recently become more pressing. For example, Bruning and Campion (2018) adopted an approach that integrates the previous perspectives by distinguishing between *role* and *resource* crafting and *approach* and *avoidance* tendencies, leading to seven conceptually new subdimensions of job crafting. In a similar line of reasoning, Zhang and Parker (2019) suggested a more comprehensive model that integrates the existing dimensions by Wrzesniewski and Dutton (2001) and Tims and Bakker (2010) with the superordinate factors of job crafting *orientation* (approach vs. avoidance), *form* (behavioral vs. cognitive) and *content* (resources vs. demands). While the division of approach and avoidance crafting has already been considered in recent research (Hu et al., 2020; Petrou & Xanthopoulou, 2021), the second differentiation into behavioral and cognitive crafting has received much less attention so far. This seems particularly problematic as the existing empirical research and development of interventions, mainly based on the conceptualization of Tims and Bakker (2010), also largely

exclude cognitive crafting and thereby lack a comprehensive, differentiated view on job crafting theory.

Behavioral and Cognitive Crafting

As noted above, the ongoing quantitative research around job crafting focuses heavily on behavioral crafting. According to Zhang and Parker (2019), this crafting form aims at changes in actual job characteristics. It is represented in subdimensions such as *task* and *relational crafting* (Wrzesniewski & Dutton, 2001) or *increasing resources*, *seeking challenges*, and *reducing hindering demands* (Tims & Bakker, 2010). Following the theoretical trajectory of most of the prior research, behavioral crafting serves as a central pathway within the JD-R model (Demerouti et al., 2001) to rebalance job resources and demands. Job crafters actively seek out new resources like learning opportunities or support from colleagues, which in turn leads to an increase in these resources as well as other positive outcomes (Tims et al., 2015). Similarly, they try to reduce hindering demands that exceed their capabilities to avoid burnout (Tims & Bakker, 2010).

The theoretical framing within the JD-R model provides a powerful momentum for quantitative research on behavioral job crafting and an essential basis for understanding how we can apply it in practice to achieve positive effects. However, the a priori categorization of job demands and resources in the JD-R model overlooks a key personal component emphasized in other stress models, such as the transactional theory of stress (Lazarus & Folkman, 1984): cognitive appraisal. Research on work design has begun integrating individual appraisal of work characteristics, roles, or situations into understanding workplace experiences (e.g., Ohly & Fritz, 2010; Boswell et al., 2004; Zhang & Parker, 2022). For instance, Li et al. (2021) found that employees can perceive the same job characteristics as both challenges and hindrances, and these appraisals significantly moderate effects on their well-being. Building on this concept, *cognitive crafting* can be understood as a proactive effort by employees to deliberately influence how they appraise their work to create a more positive or meaningful work experience (Wrzesniewski & Dutton, 2001). In their meta-synthesis of the qualitative job crafting literature, Lazazzara et al. (2020) report cognitive crafting strategies such as redefining one's view on the nature of a task, reframing separate tasks as a meaningful whole, or consciously emphasizing positive aspects of a role. Berg et al. (2013) support this mental form of job crafting with evidence for the sole impact of mind-sets on subjective experiences at work, without physically changing anything about the job (e.g., Crum & Langer, 2007). Therefore, in our study, we contrast behavioral crafting – *changing actual job characteristics to align job resources and demands with one's preferences* – with cognitive crafting, *changing the perception of work characteristics, roles, and the job as a whole*. These conscious changes of perception may include, for example, looking at the job as an integrated whole instead of a set of discrete tasks or focusing on the influence one's work has on the “bigger picture”. Crafters thereby increase their sense of meaningfulness (Geldenhuis et al., 2021) and align the job better with their personal interests or essential aspects of identity (Berg et al., 2010).

Although both forms undoubtedly represent job crafting, Zhang and Parker (2019) also emphasize their aggregate nature and that they should not be used interchangeably. Instead, they suggest on a theoretical level that the two forms might influence each other reciprocally while still displaying significant differences. This differentiation of job crafting forms constitutes the core of our study. We empirically investigate behavioral and cognitive crafting regarding their stability over time, their reciprocal influences over time, and their comparability regarding autonomy as an antecedent and effects on the outcome of person-job fit.

Stability of Crafting Forms

Tims and Bakker (2010) generally assume that behavioral job crafting does not need a long-term focus but can be a short-term reaction to demanding work tasks or periods. This assumption is supported by findings on short-term fluctuations, even daily (Bakker & Oerlemans, 2019). However, there is no empirical evidence yet for the variability or stability of cognitive crafting or comparing the two forms of job crafting in this regard. In contrast to changing individual tasks or demands, cognitive crafting aims at the broader, more general perception and framing of the job (Berg et al., 2013). This reframing goes hand in hand with changes in self-image and perceived roles at work (Wrzesniewski & Dutton, 2001). Thereby, cognitive job crafting might be more person-related and less dependent on external circumstances than behavioral crafting. In several cross-sectional studies (Niessen et al., 2016; Schachler et al., 2019), cognitive crafting exhibited lower relations with work characteristics like autonomy or task interdependence than behavioral crafting. Therefore, we propose the following hypothesis:

Hypothesis 1: Cognitive crafting is more stable over time than behavioral crafting.

Reciprocal Relations between Behavioral and Cognitive Crafting

Although behavioral and cognitive crafting represent distinct forms of job crafting, they have been suggested to be closely related and to influence each other (Zhang & Parker, 2019). Since the detailed analysis of the nature of this relationship is a novelty in the literature, we assume both directions – behavioral to affect cognitive crafting and vice versa – and will empirically contrast and quantify their respective strengths in the current study. First, concerning the effect of behavioral crafting on cognitive crafting, we propose that cognitive crafting can, at least in part, reflect the perception and further cognitive reworking of previously altered job characteristics (Zhang & Parker, 2019). As tasks or relationships at work are modified through behavioral crafting, we expect cognitive changes to follow gradually. For example, as new tasks expand the work role, they provide new building blocks for subsequent cognitive crafting (e.g., concentrating on new aspects that are particularly meaningful), or changed social relationships provide feedback that individuals can use to update their identity at work (Wrzesniewski et al., 2003). Support for such an

influence of behavioral crafting on cognitive variables stems from Van den Heuvel et al. (2015), who discovered that a behavioral crafting intervention had a cognitive effect on participants in the form of higher self-efficacy beliefs. In line with this reasoning, Schachler et al. (2019) found a positive, albeit small, correlation between cognitive crafting and self-efficacy in their cross-sectional study ($r=0.22$).

Second, concerning the effect of cognitive crafting on behavioral crafting, when employees alter how they perceive their job and role at work, this should also be expressed in changed behaviors over time, for example, which tasks they accept or give up and how they present themselves in social contexts at work. Wrzesniewski and Dutton especially emphasize this influence of cognitive crafting in their original conceptualization, as it “fundamentally changes how employees approach the job” (Wrzesniewski & Dutton, 2001, p. 186). From this point of view, cognitive crafting might act as a new pair of glasses: changing one’s appraisal of the job or specific characteristics influences which goals are targeted in the future (Horan et al., 2020) and which behavioral changes may follow, thereby reflecting an implementation intentions process (Gollwitzer and Sheeran, 2006). Support for such an anticipated effect stems from studies that apply a division of job crafting in the form of *crafting intentions* and *crafting behavior* (Costantini et al., 2022; Tims et al., 2015). They demonstrate how job crafting intentions – a more cognitive representation of the planned behavioral changes – lead to actual job crafting behaviors later on.

Prior, cross-sectional findings on the relationship between behavioral and cognitive crafting provided first indications for moderate, positive correlations (Niessen et al., 2016; Slemp & Vella-Brodrick, 2013). The current study extends these findings by considering reciprocal relationships over time and comparing their strengths using competing informative hypotheses (for further details on this approach, see section “[Analysis strategy](#)”). To determine which reciprocal influence might be the stronger one over time, we will compare the following two competing hypotheses:

Hypothesis 2.1: Behavioral crafting is a stronger positive predictor over time of cognitive crafting than cognitive crafting is of behavioral crafting.

Hypothesis 2.2: Cognitive crafting is a stronger positive predictor over time of behavioral crafting than behavioral crafting is of cognitive crafting.

Decision-Making Autonomy as an Antecedent of Job Crafting

To compare the job crafting forms in context, we next focus on a key predictor regarding situational antecedents of job crafting: autonomy (Rudolph et al., 2017). Following the broader job demands-resources literature (e.g., Demerouti et al., 2001) and all aforementioned theoretical job crafting perspectives (Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001; Zhang & Parker, 2019), we assume a positive influence of autonomy on job crafting in general. Especially the opportunity to make independent decisions is considered to be a central resource that enables individuals to take action (Debus et al., 2020; Demerouti et al., 2001), gain further resources, and buffer demands (Bakker & Demerouti, 2007). Thereby, job crafting should occur more readily in jobs or situations with a high degree of decision-making

autonomy as the behavioral or cognitive changes can be executed with concrete and independent decisions, without possible opposing factors such as managerial control or high interdependency with colleagues. While previous job crafting literature has mostly considered autonomy as a general, broad construct (e.g., Kim et al., 2018; Rudolph et al., 2017), we aim to specify the impact of this job characteristic as several studies have pointed out its multidimensional nature (e.g., Breaugh, 1985; De Spiegelaere et al., 2016; Morgeson and Humphrey, 2006). We expect that, in particular, the freedom to rely on one's personal judgment when making decisions at work – decision-making autonomy – will facilitate following behavioral and cognitive crafting changes and accordingly specify our examination to this facet.

We anticipate this facilitating effect for both behavioral and cognitive crafting but to a lesser extent for the latter. A meta-analysis by Rudolph et al. (2017) further supports this notion with positive relations between job autonomy and overall behavioral crafting, whereas at least initial correlative evidence points to a link between autonomy (or related constructs) and cognitive crafting as well (e.g., Leana et al., 2009; Niessen et al., 2016). Cognitive crafting has previously been shown to have weaker links with external work characteristics (e.g., Niessen et al., 2016; Schachler et al., 2019) and, through its central mechanism of cognitive appraisal (rather than changing actual job characteristics), lies much more within the individual's control. Consequently, even when the external conditions of a job do not allow for much behavioral change, cognitive crafting may still offer opportunities for changing one's perspective and views on the job.

Hypothesis 3: Decision-making autonomy will be a positive predictor over time of a) behavioral crafting and b) cognitive crafting. Furthermore, we assume that c) this prediction will be weaker for cognitive crafting than for behavioral crafting.

Person-job Fit as an Outcome of Job Crafting

The central objective of behavioral and cognitive job crafting based on different theoretical perspectives is to “change [employees'] levels of job demands and job resources in order to align them with their own abilities and preferences” (Tims & Bakker, 2010, p. 4) and to “customize [the job] to fit their own sense of what the job should be” (Wrzesniewski & Dutton, 2001, p. 185). In short: to increase person-job fit. As a subtype of person-environment fit, person-job fit describes the compatibility between an individual and the respective job (Kristof, 1996), referring to the two aspects of whether an employee's needs, wishes, and preferences are met by what the organization provides (*needs-supplies fit*) and whether the knowledge, skills, and abilities of the employee correspond to the demands of the job (*demands-abilities fit*). According to Kristof-Brown et al. (2005), person-job fit predicts numerous organization-relevant outcomes, thus further emphasizing the central importance of this proximal outcome of job crafting.

The goal to increase person-job fit might be accomplished through behavioral as well as cognitive job crafting. Since behavioral crafting involves the actual

modification of work characteristics, by the end of this process, there may be an objectively better fit between those and the characteristics of the individual, for example, as resources and demands are better aligned (Tims & Bakker, 2010) or new tasks and relationships serve the employee's needs and abilities more effectively (Wrzesniewski & Dutton, 2001). Cognitive crafting may also lead to an improved subjective assessment of person-job fit through changes in perception. Especially in jobs where changes on the behavioral level are harder to realize, for example, due to low levels of autonomy (Rudolph et al., 2017), job crafters still can reframe aspects of their job to extend their perspective to the big picture or, on the contrary, to focus on single parts of their job and thus experience a higher fit. Previous findings partially support both of these paths to an improved person-job fit. Behavioral crafting (of work characteristics and relations) related to an increase in both dimensions of person-job fit among Chinese employees in a study by Lu et al. (2014), while Niessen et al. (2016) provide evidence for a prediction of needs-supplies fit through cognitive crafting. However, so far, there has been no direct juxtaposition of these effects and thus no comparison of their respective strengths, which is necessary to build a comprehensive theory concerning job crafting outcomes at work.

To determine which influence might be the stronger one over time, we will compare two competing hypotheses:

Hypothesis 4.1: Behavioral crafting is a stronger positive predictor over time of a) needs-supplies and b) demands-abilities person-job fit than cognitive crafting.

Hypothesis 4.2: Cognitive crafting is a stronger positive predictor over time of a) needs-supplies and b) demands-abilities fit than behavioral crafting.

Exploratory Analysis: Identifying Job Crafting Profiles

In addition to the pre-registered hypotheses described above, we took an additional explorative person-centered approach. While our primary analyses focused on systematically examining the dynamics of behavioral and cognitive crafting forms (e.g., their stability, reciprocal relationships, and links with autonomy and person-job fit), a latent profile analysis (LPA) and latent transition analysis (LTA) complement this by addressing potential inter-individual differences in patterns of crafting forms and changes in profiles over time. Individuals may use distinct combinations of crafting forms, which could translate into meaningful job crafting profiles that reveal subgroup-specific patterns masked in overall sample-level analyses (Wang & Hanges, 2011). Utilizing this level of inter-individual heterogeneity allows us to examine the interplay of the four job crafting forms and their unique relations to autonomy and person-job fit from an additional perspective.

Existing evidence has, for example, already identified different profiles in terms of more active or more passive crafters (Mäkikangas, 2018), or in the use of approach and avoidance strategies (Mäkikangas & Schaufeli, 2021), and demonstrated differences between profiles in work engagement or well-being (Ho et al., 2024). We build on these findings and extend them by applying the integrative job crafting framework (Zhang & Parker, 2019) with the widest range of possible job

crafting forms to date. Thereby, this additional analysis contributes to our aim of providing new insights into the heterogeneity of job crafting processes, as we examine whether distinct crafting profiles can explain unique patterns of relationships with autonomy and person-job fit and if individuals' profile membership varies over time or remains stable.

Method

Pre-Registration

Our main hypotheses, their theoretical underpinnings, the desired sample size, all measures, and planned analyses were defined in the study's pre-registration. As part of a "PsychLab online" call by the Leibniz Institute of Psychology (ZPID), this proposal underwent anonymous peer review prior to data collection. Subsequently, the data collection was funded by PsychLab using Respondi as a panel provider (targeting German employees; for a similar panel approach, see Debus et al., 2023).

We adhered to all planned hypotheses, methods, and analyses. Based on the statistical results, we adjusted the execution of some analyses and performed additional ones. Those deviations from the pre-registration are marked at all times. Due to space constraints, we have omitted a planned analysis on the perception of decision-making autonomy as a resource or demand that can be found in the pre-registration.

Procedure and Participants

This study follows a longitudinal design with three times of measurement (T1, T2, and T3) and a four-week time-lag each, and data were collected using Internet-based surveys. Participants received demographic questions (T1) and items on behavioral crafting, cognitive crafting, person-job fit, and decision-making autonomy (T1, T2, and T3). Questionnaires and items within the scales were presented in randomized order. We screened for significant changes in job design (e.g., changing teams, jobs, or organizations) within the time-lag.

Regarding a suitable time interval, we considered both preliminary findings from the field of job crafting and general recommendations before designing our study. The few studies to date that measured job crafting over time rely on intervals between two weeks (Niessen et al., 2016) and four weeks (Tims et al., 2015). Dormann and Griffin (2015) support this approach and state that optimal time intervals for cross-lagged designs are usually relatively short. On this basis, we decided on a time interval of four weeks. Since job crafting is generally considered to be an everyday occurrence (Petrou et al., 2012), this time period provides enough opportunities for change but is limited enough to avoid major top-down shifts in job design. Consequently, participants were instructed to consider their work over the last four weeks for all three measurement points to keep relevant time frames constant.

To ensure that job crafting can be assessed sufficiently, we included participants with an inclusion criterion of a minimum weekly working time of 10 h, as well as no significant changes in job design (e.g., taking on a new job, reduction of working hours below 10 h/week) within the following two four-week intervals.

At Time 1, the survey was completed by 472 participants, and 384 (81.4%) continued until Time 2. At Time 3, $N=302$ (64.0%) participants completed all three measurements. We next screened for participants who reported significant external changes in job design (e.g., changing jobs or organizations) within the four-week intervals, failed one of the two included attention check items (e.g., “Please select option “1—does not apply at all” for this item”), or demonstrated low individual reliability (calculated according to the procedure of Huang et al., 2012), indicating insufficient effort responding. Therefore, we excluded 18 individuals, and the final sample was $N=284$ individuals who provided answers at all the time points, yielding a response rate of 60.2%. Of those, 54.2% of participants identified as male, 45.4% as female, and one person chose not to indicate their gender. Ages ranged from 19 to 68 years ($M=45.17$, $SD=12.22$). The sample represents a wide range of industries, the strongest being health and social professions (13.4%), public administration (10.9%), business services (6.7%), or education (5.6%), with the remaining participants working in various other industries such as construction/architecture, finances, research, art and culture, craftsmanship, human resources management, law, or food/agriculture. The educational backgrounds of the sample were also varied, with 31.5% having a secondary school leaving certificate as their highest qualification, 17.9% with A-levels and 30.8% with a bachelor’s or master’s degree. On average, participants worked 39.33 h per week ($SD=5.14$), and 27.6% had leadership roles.

Measures

Job Crafting

Job crafting was measured using the scale by Lopper et al. (2024) that assesses job crafting according to the theoretical framework by Zhang and Parker (2019). The questionnaire measures approach and avoidance behavioral crafting (e.g., “I actively develop relationships with other people”, “I spend less time working on tasks that don’t really interest me”) and approach and avoidance cognitive crafting (e.g., “I concentrate on the positive aspects of my work”, “I take mental distance from tasks that put an emotional strain on me.”) with 20 items each. Answers were indicated on a five-point Likert scale (*totally disagree* to *totally agree*). The German version of the items has been validated in several studies (Lopper et al., 2024).

Decision-making Autonomy

We measured decision-making autonomy using the Work Design Questionnaire (Morgeson & Humphrey, 2006; German version by Stegmann et al., 2010). The scale for *decision-making autonomy* encompasses three items (e.g., “The job allows

me to make a lot of decisions on my own”), which were rated on a five-point Likert scale (*strongly disagree* to *strongly agree*).

Person-job Fit

We applied the *needs-supplies person-job fit* and *demands-abilities person-job fit* subscales by Cable and DeRue (2002). A forward–backward translation of the altogether six items (e.g., “The job that I currently hold gives me just about everything that I want from a job” – representing needs-supplies fit, “My abilities and training are a good fit with the requirements of my job” – representing demands-abilities fit) into German has been adopted in prior studies of the research group with good psychometric quality. Participants rated their answers on a five-point Likert scale (*totally disagree* to *totally agree*).

Analysis Strategy

To match the study’s central aim of a comprehensive juxtaposition of behavioral and cognitive crafting, we chose the methodologically fitting approach of structural equation modeling (SEM) combined with Bayesian hypothesis testing. Unlike the mere rejection/non-rejection of a hypothesis in null hypothesis testing, this methodology enables us to calculate a Bayes factor (BF) for each hypothesis. This factor quantifies the support for each hypothesis, allowing us to subsequently compare multiple (competing) hypotheses and their Bayes factors directly, for which no definite difference could be expected on a purely theoretical basis (Hojtink et al., 2019). In an example of hypothesis A with a Bayes factor of 2 and a competing hypothesis B with a Bayes Factor of 0.50, the resulting comparative Bayes factor (2/0.50) of 4 may be interpreted as having four times more support in the data for hypothesis A as compared to hypothesis B.

We conducted latent variable modeling with Bayesian estimation within Mplus 8.4 (Muthén & Muthén, 2013), based on two Markov chain Monte Carlo chains (10,000 iterations, 50% burn-in), and Mplus default priors (Van de Schoot et al., 2012). Bayes factors were computed using the R package *bain* (Van Lissa et al., 2023). To accommodate the model’s complexity and increase power, we conducted three separate SEMs: The first crafting model included only the job crafting factors, their auto-regressive paths and reciprocal cross-lagged influences (H1-2), a second antecedent model with crafting factors and decision-making-autonomy as an antecedent (H3), and a third outcomes model contained the crafting factors and needs-supplies and demands-abilities fit as outcomes (H4). The scale items acted as indicators of the latent variables. Trace plots (see Figure E1 in the Electronic Supplementary Material, ESM), and Potential Scale Reduction (PSR) < 1.05 indicated model convergence for all SEMs (Carlin & Chib, 1995). We also report RMSEA, SRMR, CFI and TLI as traditional fit indices (Hooper et al., 2008).

For the additional LPA, we approached the number of profiles in an iterative process using Mplus 8.4 (Muthén & Muthén, 2013), based on guidelines from Nylund et al. (2007) and the widely used procedure in latent profile analysis (LPA) research

(e.g., Spurk et al., 2020). As these additional analyses have not been pre-registered, contrary to the preceding parts of our study, we apply a more conservative significance level of $p < 0.01$ for this analysis.

Results

Preliminary Analyses

Descriptive statistics and intercorrelations of all study variables are presented in Table 1. Reliability analysis revealed solid measurement models and reliabilities for all variables except the job crafting subscales (see Table 1, Cronbach's α coefficients in brackets). Further inspection via confirmatory factor analysis (CFA) showed that modeling job crafting as two (behavioral and cognitive) factors did not yield satisfactory fit results as two other strong factors were present within the item content: approach and avoidance tendencies. Since these are also considered in the original conceptualization of the scale (Lopper et al., 2024), we decided to split the crafting factors further for our analyses. Thus, behavioral crafting is represented in the following analyses by the two factors *behavioral approach crafting* (BAP) and *behavioral avoidance crafting* (BAV), and cognitive crafting by *cognitive approach crafting* (CAP) and *cognitive avoidance crafting* (CAV).

An initial run of analyses also confirmed our decision to split the crafting factors more finely. Presumably, suppression effects emerged in the SEMs due to the high intercorrelations, with negative coefficients for some cross-lagged paths and simultaneous positive bivariate correlations. As Maassen and Bakker (2001) advised in this case, we tried to identify and remove the problematic variable to allow a meaningful interpretation of the remaining model. Further analyses in Mplus indicated this to be the case for cognitive avoidance crafting at T3, so we excluded this factor from further analyses.

Following the recommendations of De Beer et al. (2016) and Mackinnon et al. (2023) for cross-lagged designs, we subsequently ran multiple CFAs with increasingly strict constraints to test for measurement invariance. The results indicated that metric and/or scalar longitudinal measurement invariance holds for all our study variables (see Table E2 in ESM).

Hypotheses Testing

In total, we examined three structural equation models to test our hypotheses on the stability and reciprocal relations of crafting forms (H1-2), decision-making autonomy as an antecedent (H3), and person-job fit as an outcome (H4).

Stabilities & Reciprocal Relations of Crafting Forms (H1-H2)

Our hypothesized model included latent factors for all four job crafting factors (BAP, CAP, BAV, CAV) at all three times of measurement (except CAV, which was

Table 1 Descriptive statistics and correlations of study variables

Variable	M	SD	1	2	3	4	5	6	7	8	
1. BAP T1	3.45	.67	(.85)								
2. CAP T1	3.37	.70	.75	***							
3. BAV T1	2.52	.73	.18	**	(.86)						
4. CAV T1	2.68	.66	.15	*	.77	***					
5. DMA T1	3.54	.98	.40	***	.40	.00	(.91)				
6. BAP T2	3.39	.73	.75	***	.67	.06	.35	***	(.87)		
7. CAP T2	3.34	.72	.60	***	.75	.14	.38	***	.81	***	
8. BAV T2	2.54	.74	.08	***	.06	.54	.04	.11	.15	*	
9. CAV T2	2.72	.66	.02	***	.47	.53	-.04	.12	.23	***	
10. DMA T2	3.52	1.00	.39	***	.06	.02	.81	.40	.42	***	
11. N-S Fr T2	3.45	.98	.28	***	.45	.00	.49	.35	.46	***	
12. D-A Fr T2	3.70	.90	.32	***	.41	-.06	.44	.34	.39	***	
13. BAP T3	3.37	.72	.66	***	.56	.07	.37	.74	.58	***	
14. CAP T3	3.34	.71	.60	***	.72	.14	*	.68	.75	***	
15. BAV T3	2.51	.77	.06	***	.06	.53	.03	-.02	.04	.74	
16. CAV T3	2.74	.70	.04	***	.08	.60	-.08	.05	.12	.56	
17. N-S Fr T3	3.50	.99	.31	***	.42	.01	.51	.35	.41	***	
18. D-A Fr T3	3.76	.91	.27	***	.32	-.06	.50	.26	.30	***	
Variable	9		10	11	12	13	14	15	16	17	18
1. BAP T1											
2. CAP T1											
3. BAV T1											
4. CAV T1											
5. DMA T1											
6. BAP T2											

Table 1 (continued)

Variable	9	10	11	12	13	14	15	16	17	18
7. CAP T2										
8. BAV T2										
9. CAV T2	(.81)									
10. DMA T2	-04	(.90)								
11. N-S Fit T2	-07	.50	***							
12. D-A Fit T2	-13	.45	***	***	(.87)					
13. BAP T3	.01	.37	***	***	.29	***				
14. CAP T3	.10	.36	***	***	.35	.78	***	(.87)		
15. BAV T3	.55	.04	***	**	-.17	.07	*	(.89)		
16. CAV T3	.60	.00	***	**	-.16	.18	**	.20	***	.70
17. N-S Fit T3	-.08	.44	***	***	.62	.37	***	.51	***	-.13
18. D-A Fit T3	-.18	.42	**	***	.73	.31	***	.37	***	-.14
									*	.80

										(.87)

Note. $N = 262-284$. *** $p < .001$. ** $p < .01$. * $p < .05$. Cronbach's α coefficients in brackets. T1 = measurement at time 1, T2 = measurement at time 2, T3 = measurement at T3

BAP = Behavioral approach crafting; CAP = Cognitive approach crafting; BAV = Behavioral avoidance crafting; CAV = Cognitive avoidance crafting; DMA = d Decision-making autonomy, N-S Fit = Needs-supplies Person-Job fit, D-A Fit = Demands-abilities Person-Job fit

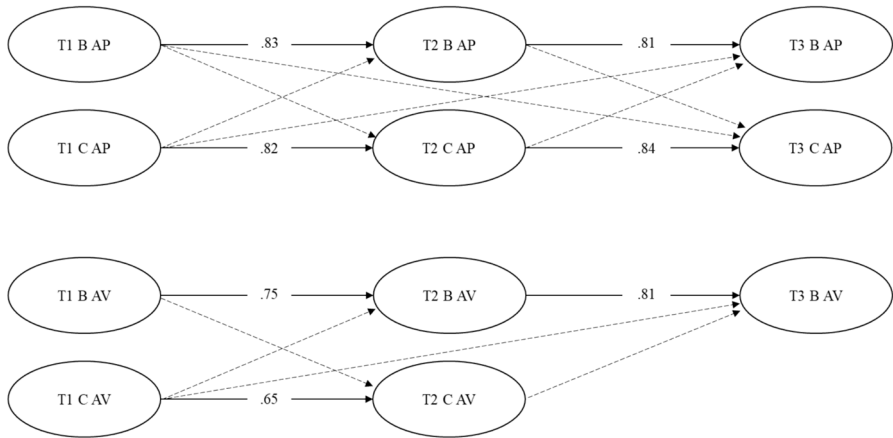


Fig. 1 Structural equation model of auto-regressive and cross-lagged relations between crafting forms (H1-2). *Note.* $N=267-284$. Standardized solution. All presented coefficients are significant at $p < .01$ level. Non-significant paths in dashed lines. Factors were allowed to correlate within time points. Measurement model omitted to simplify presentation

Table 2 Results of Bayesian informative hypothesis testing (H1)

Hypothesis	Complexity	Model Fit	Bayes Factor	BF comp
H1.1 (<i>Cognitive forms more stable</i>)	.011	.012	0.112	
H1.2 (<i>Behavioral forms more stable</i>)	.011	.013	0.126	1.125

$N=284$. BF comp. = Comparison of Bayes Factors vs. competing hypothesis

deleted at T3 for aforementioned problems with suppression), as well as all auto-regressive and cross-lagged paths. While displaying adequate fit ($\chi^2=10,473.40$, $df=5876$, $p=0.0000$; $RMSEA=0.052$, $SRMR=0.087$), none of the cross-lagged paths among the job crafting factors, representing reciprocal influences over time, were significant. The final adjusted model ($\chi^2=10,528.57$, $df=5889$, $p=0.0000$; $RMSEA=0.052$, $SRMR=0.089$, $CFI=0.94$, $TLI=0.92$) is depicted in Fig. 1.

The depicted stability coefficients inform the further calculation of the Bayes factors for testing Hypothesis 1 (see Table 2). Against our expectations, a higher Bayes factor supports that behavioral crafting forms (BAP and BAV) are more stable over time than cognitive forms, thereby rejecting Hypothesis 1. However, a comparative Bayes factor of 1.125 (with a value of just above 1) indicates relatively weak evidence for this comparison (Wiley & Jarosz, 2014) and should be interpreted only cautiously.

Since none of the cross-lagged paths among the crafting factors reached significance in the SEM, no Bayes factor can be computed at this point, and we must reject both competing hypotheses (H2.1 and H2.2) concerning the strengths of reciprocal relationships.

Decision-making Autonomy as an Antecedent (H3)

To test our hypotheses on decision-making autonomy as an antecedent of the crafting forms (H3), we first extended the adapted SEM from H1 to include a latent decision-making autonomy factor at T1 and T2, each exerting cross-lagged paths to the subsequent crafting factors. We also controlled for the stability of decision-making autonomy. The model exhibits acceptable fit ($\chi^2 = 11,339.26$, $df = 6459$, $p = 0.0000$; $RMSEA = 0.051$, $SRMR = 0.084$, $CLI = 0.95$, $TLI = 0.95$). However, all cross-lagged paths from decision-making autonomy to the crafting factors remain non-significant. Thus, H3 was not supported. Table E3 of the ESM shows all parameter estimates.

Person-job Fit as an Outcome (H4)

A third longitudinal SEM included the four crafting factors, needs-supplies person-job fit, and demands-abilities person-job fit latent factors as outcome variables at T2 and T3. While displaying mediocre fit ($\chi^2 = 15,251.84$, $df = 7891$, $p = 0.0000$; $RMSEA = 0.057$, $SRMR = 0.108$, $CFI = 0.92$, $TLI = 0.89$), the model only contained significant auto-regressive paths. None of the cross-lagged paths from the crafting forms to the person-job fit factors reached significance. Thus, hypotheses H4.1 and H4.2 were rejected. All parameter estimates are depicted in Table E4 of the ESM.

Additional Analysis: Job Crafting Profiles

Starting from two latent profiles, we assessed several fit indices – log likelihood (LL), Akaike information criterion (AIC), Bayesian information criterion, sample-size-adjusted BIC (SSA-BIC), Vuong-Lo-Mendell-Rubin test (VLMR), Bootstrapped likelihood ratio test (BLRT), and entropy – as well as theoretical plausibility (Gabriel et al., 2015; Hirschi & Valero, 2017). Table 3 presents all fit indices and associated tests for profile solutions at T1 and T2. We first defined a profile solution with data from T1 and then validated it with data from the following two measurement times.

While LL, AIC, and BIC steadily decrease to six profiles, the VLMR converges on a five-profile solution. However, compared to the four-profile solution, it only shows a minimal increase in entropy and equally minimal decreases in LL, AIC, and BIC, indicating only a minor increase in explanatory power. Regarding content, five profiles reveal only a further quantitative differentiation and no qualitatively meaningful one. Accordingly, we opted for a four-profile solution. Analysis with T2 and T3 data validated this choice, as the BLRT converges for a 4-profile solution and shows the highest entropy value (see Table 3).

Figure 2 depicts the four profiles in more detail. Profile 1 is characterized by a below-average use of all four crafting forms and consequently labeled as *passive crafters* (12%). The largest profile (55%) represents *average crafters* who engage in medium behavioral and cognitive approach crafting and slightly above-average behavioral and cognitive avoidance crafting. The third profile contains a qualitative distinction from the other three: the *approach crafters* (26%) exhibit above-average behavioral and cognitive approach crafting while their use of avoidance forms is

Table 3 Fit statistics for latent job crafting profiles at T1, T2, and T3

T1 No. of profiles	LL	FP	AIC	BIC	SSA-BIC	VLMR(<i>p</i>)	BLRT(<i>p</i>)	Entropy	Latent profile proportions %
1	-1190.31	8	2396.61	2425.806	2400.438	-	-	-	100
2	-1119.72	13	2265.44	2312.872	2271.649	.050	<.001	0.747	73/27
3	-1064.53	18	2165.06	2230.746	2173.667	.013	<.001	0.729	34/16/50
4	-1013.36	23	2072.73	2156.651	2083.717	.044	<.001	0.809	12/55/26/7
5	-981.90	28	2019.78	2121.970	2033.181	.017	<.001	0.814	6/33/30/30/1
6	-954.72	33	1975.43	2095.849	1991.204	.061	<.001	0.820	5/9/35/23/1/27
T2 No. of profiles									
1	-1210.81	8	2437.62	2466.73	2441.36	-	-	-	100
2	-1146.23	13	2318.45	2365.75	2324.53	<.001	<.001	.88	10/90
3	-1075.72	18	2187.44	2252.93	2195.85	.01	<.001	.84	64/9/27
4	-1027.51	23	2101.03	2184.71	2111.778	.02	<.001	.85	9/65/18/9/
5	-1006.82	28	2069.63	2171.50	2082.71	.69	<.001	.81	6/16/52/20/6
T3 No. of profiles									
1	-1167.05	8	2350.10	2378.80	2353.43	-	-	-	100
2	-1091.50	13	2209.01	2255.64	2214.42	.02	<.001	.79	20/80
3	-1029.59	18	2095.18	2159.75	210.268	<.001	<.001	.81	18/28/54
4	-994.664	23	2035.33	2117.84	2044.91	.04	<.001	.83	13/42/29/16
5	-974.54	28	2005.074	2105.52	2016.74	.55	<.001	.79	15/1/42/28/14

$N_1 = 284$, $N_2 = 281$, $N_3 = 267$. LL = log-likelihood; FP = free parameters; AIC = Akaike information criterion; BIC = Bayesian information criterion; SSA-BIC = sample-size adjusted Bayesian information criterion; VLMR = Vuong-Lo-Mendell-Rubin test; BLRT = Bootstrapped likelihood ratio test

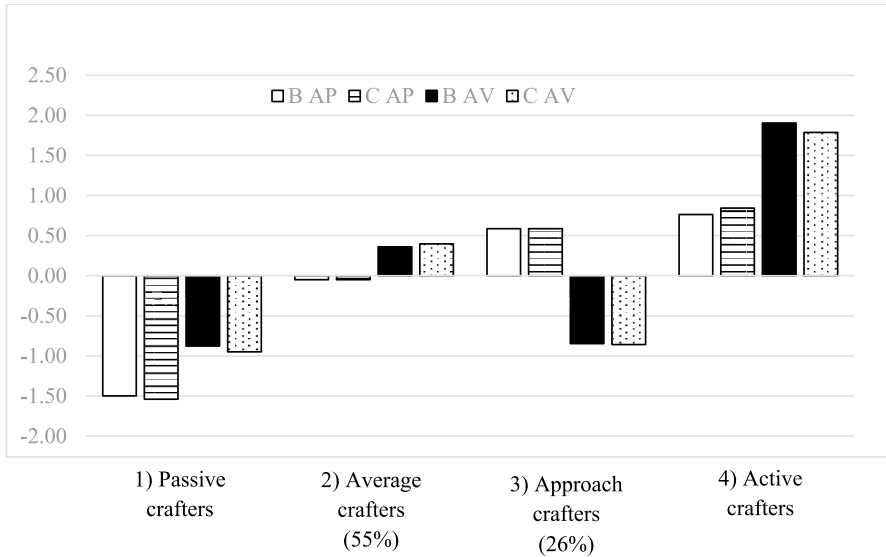


Fig. 2 Latent job crafting profiles. *Note.* $N=284$, profiles at T1. Y-Axis refers to standardized means of job crafting forms. B AP=behavioral approach crafting, C AP=cognitive approach crafting, B AV=behavioral avoidance crafting, C AV=cognitive avoidance crafting

significantly below average. Another quantitative differentiation at the upper end is found in the smallest group (7%). The profile of *active crafters* makes strong use of all four job crafting strategies, whereby the far above-average use of the two avoidance forms is particularly striking. Using Time 2 and Time 3 data, we were able to replicate all four profiles. In addition, we performed a latent transition analysis across all three measurement points to examine the stability of profile memberships or possible changes between specific profiles (Muthén & Muthén, 2000). For *average*, *approach* and *active crafters*, probabilities of transitioning to another profile at T2 or T3 ranged between 0 and 0.09, indicating that the vast majority of individuals remain in the same profile (see Table E5 in ESM). Merely participants in the *passive*

Table 4 Decision-making autonomy (T1) as an antecedent of job crafting profiles (T2)

	Passive vs. Average crafters	Passive vs. Approach crafters	Passive vs. High crafters	Average vs. Approach crafters	Average vs. Active crafters	Approach vs. Active crafters
DMA	-0.88***	-2.0**	-1.87***	-1.12	-0.99	0.13

$N=272$. DMA=decision-making autonomy. All values are estimates from the R3STEP logistic regression analyses and compare the influence of the antecedent DMAs for two profiles at a time. Negative values indicate that higher values on the antecedent make a person more likely to be in the second compared profile. Positive ones suggest higher values on the antecedent go hand in hand with a higher likelihood for the first profile

** $p < .01$. *** $p < .001$

Table 5 Differences of job crafting profiles (T1) in person-job fit (T2)

	1) Passive crafters <i>M (S.E)</i>	2) Average crafters <i>M (S.E)</i>	3) Approach crafters <i>M (S.E)</i>	4) Active crafters <i>M (S.E)</i>	Wald's χ^2 / <i>p</i> -value	Profile differences
N-S Fit	2.81 (0.19)	3.21 (0.08)	3.94 (0.09)	4.05 (0.16)	62.99, <i>p</i> < .001	1 < 3***, 4*** 2 < 3***, 4***
D-A Fit	3.35 (0.16)	3.45 (0.07)	4.18 (0.07)	4.27 (0.14)	68.35, <i>p</i> < .001	1 < 3***, 4*** 2 < 3***, 4***

N = 281. ** *p* < .01. *** *p* < .001. All analyses were run utilizing the DCON procedure in Mplus. N-S Fit = needs-supplies Person-Job fit, D-A Fit = demands-abilities Person-Job fit

crafters profile with the lowest level of all crafting forms at T1 exhibited transition probabilities of 0.150 (T2) and 0.292 (T3) into the average crafters profile.

Furthermore, we examined whether decision-making autonomy as an antecedent predicts profile membership using the three-step R3STEP procedure (Asparouhov & Muthén, 2014; Vermunt, 2010) and person-job fit as an outcome with the DCON command (Lanza et al., 2013). We modeled T1 decision-making autonomy as an antecedent of T2 profile membership. Individuals with higher autonomy were significantly less likely to belong to the passive crafters profile than to the other three (Table 4). Finally, we tested whether the profiles exhibited differing person-job fit, with T1 profile membership predicting T2 needs-supplies and demands-abilities person-job fit (see Table 5). The overall Wald's χ^2 -Test indicated statistically significant differences for both fit dimensions. Approach and active crafters revealed the highest needs-supplies as well as demands-abilities fit, compared to passive or average crafters. The latter two did not differ significantly (at the *p* < 0.01 significance level), nor did approach or active crafters in a direct pairwise comparison.

Discussion

Overview of Study Results

Job crafting is a currently relevant and popular construct for practical applications. It identifies individual levers for improving the work situation and thus influences global desirable outcomes such as well-being and performance (Lichtenthaler & Fischbach, 2019; Rudolph et al., 2017). However, this popularity has led to a great deal of heterogeneity around the construct in terms of how it is operationalized theoretically and applied practically. Many studies either build on a global indicator (which already has been criticized, cf. Ebert & Bipp, 2022; Zampetakis, 2023) or single out effects of individual forms, for example, increasing social resources (e.g., Breevaart & Tims, 2019) or approach crafting (e.g., Teng et al., 2020). This might result in an oversimplified, generalized picture of job crafting or disconnected individual findings. Therefore, our paper's central aim was to juxtapose and better differentiate various forms of job crafting systematically. We compared four job crafting forms based on the integrative framework of Zhang and Parker (2019): behavioral

approach crafting, behavioral avoidance crafting, cognitive approach crafting, and cognitive avoidance crafting. In sum, our longitudinal analysis revealed no evidence of reciprocal relationships between behavioral and cognitive crafting over time, nor of longitudinal associations between the antecedent decision-making autonomy, the different crafting forms, and the outcome person-job fit. Instead, we discovered unexpectedly high stability in all job crafting forms across the three measurement points (four weeks' time lag each). In our findings, the specific facet of decision-making autonomy and both dimensions of person-job fit (needs-supplies and demands-abilities) appear merely as correlates of the job crafting forms but not as antecedents or subsequent outcomes over time.

Additional analyses using latent profiles provided another perspective on how these crafting forms can play together, identifying four quantitatively (passive, average, and active crafters) and qualitatively (approach crafters) distinct profiles. While this partially parallels prior findings on crafting profiles (Mäkikangas, 2018; Mäkikangas & Schaufeli, 2021), our results add two novel insights that supplement our central aim of systematically contrasting different job crafting forms: (1) Behavioral and cognitive crafting consistently align across profiles, with no group favoring one form over the other. (2) While approach crafting dominates one profile, no group exhibits a sole focus on avoidance crafting. Avoidance crafting appears strongest among active crafters who also exhibited the highest person-job fit, suggesting it may play a constructive role when combined with high levels of approach crafting (Zhang et al., 2024). Furthermore, profile membership appeared to be very stable across the three measurement points, supporting the surprisingly high stability of crafting in our study also from a person-centered perspective.

Theoretical Contributions

Our findings challenge traditional assumptions in job crafting theory, showing surprisingly high stability in crafting behaviors over time, independence between behavioral and cognitive crafting, and the absence of causal links with autonomy and person-job fit. We explore three potential explanations for these unexpected results and their theoretical implications in the following.

A first possible explanation lies in the absence of mediating variables in our study that could clarify the processes underlying these relationships. Prior research suggests several potential mediators, such as work engagement (De Beer et al., 2016), which has been shown to predict person-job fit and may also act as a critical intermediary between autonomy and crafting behaviors. Similarly, constructs like enhanced meaning of work, need satisfaction, and job crafting intentions have been proposed as mechanisms through which autonomy fosters crafting or crafting influences fit (Zhang & Parker, 2019; van Wingerden et al., 2017a; Wrzesniewski et al., 2013). Such mediators represent psychological processes that could explain how autonomy enables employees to proactively reshape their jobs or how crafting contributes to aligning employees' roles with their personal preferences.

Second is the possibility that the theoretically assumed causal processes do not apply as generally as expected and need to be specified in the future. Traditionally, autonomy is conceptualized as a key antecedent that enables job crafting, while

crafting is assumed to lead to improved person-job fit (e.g., Tims & Bakker, 2010; Zhang & Parker, 2019). However, the absence of longitudinal links between these variables in our study suggests that these relationships may not be as straightforward or causal as presumed. One possibility is that autonomy functions less as a precondition for crafting and more as a situational correlate or moderator. For example, employees with higher levels of autonomy may experience more opportunities to craft their jobs (van Wingerden & Poell, 2017) or more success in implementing their crafting, but autonomy might not directly cause crafting behaviors. Alternatively, autonomy could serve as a contextual factor that interacts with other variables, such as individual motivation or workplace culture, to influence crafting indirectly. For instance, employees with higher intrinsic motivation may be more likely to seize the opportunities for crafting afforded by greater autonomy, while a supportive workplace culture might amplify the perceived freedom to engage in crafting behaviors. Autonomy could even become an outcome of job crafting, with employees engaging in crafting to create conditions that afford them greater freedom and control over their work (Holman et al., 2024). Our results suggest comparably more complex relationships between job crafting and person-job fit. As mentioned above, prior research suggests that work engagement (De Beer et al., 2016), enhanced job meaning (Wrzesniewski et al., 2013), or psychological need satisfaction (van Wingerden et al., 2017a) may act as mechanisms through which crafting behaviors indirectly lead to improved fit. These mediators could help explain how crafting translates into better alignment between employees and their roles over time. Additionally, crafting and fit might interact in a bidirectional manner. Employees with poor perceived fit may engage in crafting to address misalignments (Vogel et al., 2016), while those with high fit might feel less inclined to modify their tasks or roles. Our LPA findings further illustrate that active crafters – who engage in both approach and avoidance crafting at high levels – report better person-job fit overall, suggesting that crafting strategies might not be uniformly predictive of fit but depend on individual combinations (Petrou and Xanthopoulou, 2021).

Thirdly, we would like to consider methodological aspects. While there are prior findings on the comparability and quality of panel data (Buhrmester et al., 2016), they represent a special sampling situation and may reflect participants with different motivations and familiarity with surveys than more general organizational settings. Additionally, all four job crafting forms proved highly stable over time, leaving little variance to be explained. Within two intervals of four weeks each, stability coefficients ranged from $\beta = 0.65$ to 0.84 , comparable to those of individual differences in terms of (motivational) traits in comparable time frames (Payne et al., 2007). Likewise, we found only very low transition probabilities into other profiles in the LTA, indicating that the vast majority of individuals remained in the same profile of crafting patterns over time. These findings contrast previous work that frames job crafting as a highly variable construct and, for example, examines fluctuations at the daily level (Bakker & Oerlemans, 2019; Petrou et al., 2012). Besides the diary studies mentioned above, Tims et al. (2015) examined behavioral job crafting in a longitudinal setting with a comparable one-month time frame but distinguished between job crafting intentions and actual job crafting. In a longer-term focus, van Wingerden et al. (2017b) discovered effects of a job crafting intervention after two and

three years. In comparison, the four-week time intervals between measurements in our study may not align with the natural cadence of job crafting processes. While existing research demonstrates daily fluctuations (Petrou et al., 2012; Demerouti et al., 2015), and longer intervals may allow for broader external changes to impact crafting behaviors, four weeks might represent a middle ground, potentially capturing a period where less variance occurs. Hence, the literature needs clarification on the precise nature of the temporal dimension of job crafting, such as the distinction proposed by Oldham and Hackman (2010) as to whether it operates more as on–off episodes or longer-term, iterative processes. Furthermore, our operationalization of the specific facet of decision-making autonomy, while theoretically relevant (e.g., De Spiegelaere et al., 2016), might overlook other important aspects of autonomy, such as work scheduling or methods autonomy. These dimensions – or a more global perception of autonomy at work – could play a distinct role in fostering crafting behaviors and may even be more influential in certain contexts.

Practical Implications

First, the unexpectedly high stability of job crafting forms has important implications for practice: It may explain why many interventions have no effect on job crafting, only very small effects, or only effects on particular forms of job crafting (e.g., van den Heuvel et al., 2015; Hulshof et al., 2020; van Wingerden et al., 2017a). Accordingly, significantly more effort, be it through longer or more intensive training, might be necessary to effectively and sustainably influence employees' job crafting. Instead of one-time workshops, organizations could provide ongoing support and resources for employees to engage in crafting. This could include regular check-ins with crafting suggestions via e-mail (cf. Knight et al., 2021) and resources like supervisors' feedback (Fisher & Costa, 2023) to help employees further adapt and refine their crafting strategies in the process. Another possibility is to turn individual job crafting into collective job crafting (Leana et al., 2009) by involving the social environment, for example, in team workshops. This would allow tasks or responsibilities to be directly redistributed and crafted together, while the commitment to set crafting goals might benefit from being shared with the group. A more intense engagement in interventions and stronger effects might also be achieved through more individually targeted interventions by adapting different exercises and suggestions based on personality traits, such as approach and avoidance temperament (Bipp & Demerouti, 2015), or context factors like workload (Knight et al., 2021).

Second, remaining with the specific content of interventions, the lack of reciprocal influences between job crafting forms over time has important implications. Since using one particular form is not necessarily associated with others, this also argues against overly generalized trainings to foster job crafting in general and for more tailored approaches. Thus, before designing training in practice, a thorough analysis should be made of exactly which form(s) might be most beneficial concerning the characteristics of the participants and the actual context of the application.

Third, our additional LPA approach also yielded novel insights: In terms of effective crafting (expressed by high associations with person-job fit), the profile of “high

crafters” in particular stood out. High crafters use all four measured job crafting forms at an above-average level—particularly avoidance-oriented ones. This diverges from previous findings that associate avoidance crafting mainly with adverse consequences such as decreased engagement and performance (e.g., Lichtenthaler & Fischbach, 2019; Lopper et al., 2024; Weseler & Niessen, 2016). Our results, however, imply that avoidance crafting strategies can indeed be associated with favorable outcomes if combined with other approach strategies. In this case, our previous suggestion of targeted interventions of individual forms might not be advisable. Instead, avoidance crafting should always be combined with suggestions for additional, more approach-oriented strategies.

Limitations and Directions for Future Research

Our study has some limitations, offering various starting points for future research. First, our study relied on self-report measures within a German panel sample. As such, the generalizability to other countries or organizational contexts may be limited. Furthermore, we were only able to match data sets that were available at all three measurement times and thus only analyze this specific sample. This made it impossible to obtain information about possible systematic drop-out. Future research could benefit from incorporating multiple data sources (e.g., supervisor- or peer-ratings) and diverse settings. Second, the extreme temporal stabilities across all variables and relatively small variances might have hindered detecting the assumed cross-lagged relationships over time. Although our study design followed recommendations for optimal time-lags in cross-lagged panel designs (Dormann & Griffin, 2015), future studies might consider longer time-frames or techniques like measurement burst designs (Stawski et al., 2015) that combine short-term variability and long-term change to explore how job crafting forms evolve over extended periods and whether the stability observed in this study holds true. Since Zampetakis (2021) also showed that general and daily job crafting measures vary in their associations with outcomes, future research needs to shed more light on this temporal variance in job crafting processes to understand, for example, if certain effects only occur in specific time periods.

One of the most pressing findings of our study was the lack of relations over time between the job crafting forms, the presumed antecedent decision-making autonomy, and the outcome person-job fit, which is why we would like to suggest some concrete starting points for future research that could better differentiate these relationships. As several studies highlight the multifactorial nature of autonomy (e.g., De Spiegelaere et al., 2016; Morgeson and Humphrey, 2006) other dimensions, such as scheduling or methods autonomy, may play distinct roles in fostering job crafting. Moreover, autonomy may not always act as a straightforward resource. Studies suggest paradoxical effects, where increased autonomy could also elevate demands or expectations (Dettmers & Bredehöft, 2020), potentially impacting job crafting in unexpected ways. Future research could also explore non-linear or indirect pathways to better differentiate these

relationships. For example, mediating variables such as work engagement (De Beer et al., 2016), enhanced job meaning (Wrzesniewski et al., 2003), or perceived success of crafting efforts may illuminate how crafting leads to improved fit. Additionally, autonomy's influence on job crafting might follow a curvilinear relationship, where moderate levels of autonomy prove particularly conducive to crafting behaviors (Stiglbauer & Kovacs, 2018). Including such mediating variables, moderating influences or non-linear relations in longitudinal designs could illuminate the mechanisms that drive job crafting behaviors and cognitions, their processes, and outcomes.

Finally, while our latent profile and transition analysis provided valuable insights into subgroup differences in crafting strategies, the sample size was relatively small for such analyses, which may limit the robustness of these findings (Nylund-Gibson & Choi, 2018). Future studies should aim to replicate profiles and profile transitions in larger and more diverse samples while maintaining the comprehensive bandwidth of job crafting forms investigated in our current study. This would also allow researchers to determine whether our most adaptive but smallest profile of active crafters (high approach and avoidance crafting that positively related to person-job fit) reflects a genuine subgroup pattern or might instead be influenced by response tendencies or sample-specific characteristics.

Conclusion

This study aimed to advance the understanding of behavioral and cognitive crafting by systematically contrasting their stability over time, exploring their reciprocal dynamics, and examining their distinct relationships with decision-making autonomy as an antecedent and person-job fit as an outcome. In doing so, we challenged the applicability of traditional theoretical assumptions, which often treat job crafting as a uniform construct. Our findings revealed that both crafting forms exhibit remarkably high stability over two four-week periods, challenging the notion that job crafting is inherently dynamic or malleable over intermediate timeframes. Notably, our findings did not support the existence of reciprocal relationships between the job crafting forms over time, indicating distinct processes. Moreover, our study questions the presumed causal sequence linking antecedents, crafting forms, and outcomes. In short, this research advances job crafting theory by refining the distinctions between different job crafting forms, highlighting their remarkable stability, and advocating for a critical re-evaluation of the causal assumptions embedded within theoretical frameworks of job crafting.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s41542-025-00230-5>.

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Declarations

Ethics Approval & Informed Consent The study was conducted in accordance with the ethical standards of the APA. Informed consent was obtained (according to the guidelines of the German Psychological Society, DGPs) after participants received information about the voluntariness of their participation, protection of data privacy, and usage of anonymized data. Approval was granted by the Ethics Committee of the University of Heidelberg (13.11.2020).

Competing Interests The authors have no relevant financial or non-financial interests to disclose.

Pre-Registration & Open Data All Hypotheses, their theoretical underpinnings, the desired sample size, all measures, and planned analyses were addressed in the reviewed proposal and defined in the study's pre-registration: <https://doi.org/https://doi.org/10.23668/psycharchives.5395>

The data are also openly accessible: <https://doi.org/https://doi.org/10.23668/psycharchives.12338>

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References

- Asparouhov, T., & Muthén, B. (2014). Auxiliary variables in mixture modeling: Three-step approaches using M plus. *Structural Equation modeling: A Multidisciplinary Journal*, 21(3), 329–341. <https://doi.org/10.1080/10705511.2014.915181>
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., & Oerlemans, W. G. M. (2019). Daily job crafting and momentary work engagement: A self-determination and self-regulation perspective. *Journal of Vocational Behavior*, 112, 417–430. <https://doi.org/10.1016/j.jvb.2018.12.005>
- Berg, J. M., Wrzesniewski, A., & Dutton, J. E. (2010). Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Organizational Behavior*, 31(2–3), 158–186. <https://doi.org/10.1002/job.645>
- Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (2013). Job crafting and meaningful work. In B. J. Dik, Z. S. Byrne, & M. F. Steger (Eds.), *Purpose and meaning in the workplace* (pp. 81–104). American Psychological Association.
- Bipp, T., & Demerouti, E. (2015). Which employees craft their jobs and how? Basic dimensions of personality and employees' job crafting behaviour. *Journal of Occupational and Organizational Psychology*, 88(4), 631–655. <https://doi.org/10.1111/joop.12089>
- Boswell, W. R., Olson-Buchanan, J. B., & LePine, M. A. (2004). Relations between stress and work outcomes: The role of felt challenge, job control, and psychological strain. *Journal of Vocational Behavior*, 64(1), 165–181.
- Breaugh, J. A. (1985). The measurement of work autonomy. *Human Relations*, 38(6), 551–570. <https://doi.org/10.1177/001872678503800604>

- Breevaart, K., & Tims, M. (2019). Crafting social resources on days when you are emotionally exhausted: The role of job insecurity. *Journal of Occupational and Organizational Psychology*, 92(4), 806–824. <https://doi.org/10.1111/joop.12261>
- Bruning, P. F., & Campion, M. A. (2018). A role-resource approach-avoidance model of job crafting: A multi-method integration and extension of job crafting theory. *Academy of Management Journal*, 61(2), 499–522. <https://doi.org/10.5465/amj.2015.0604>
- Buhrmester, M., Kwang, T., spsampsps Gosling, S. D. (2016). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality data? In A. E. Kazdin (Ed.), *Methodological issues and strategies in clinical research* (4th ed., pp. 133–139). American Psychological Association. gghxfn
- Cable, D. M., & DeRue, D. S. (2002). The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, 87(5), 875–884. <https://doi.org/10.1037/0021-9010.87.5.875>
- Carlin, B. P., & Chib, S. (1995). Bayesian Model Choice via Markov Chain Monte Carlo Methods. *Journal of the Royal Statistical Society. Series B, Methodological*, 57(3), 473–484. <https://doi.org/10.1111/j.2517-6161.1995.tb02042.x>
- Costantini, A. (2024). Rethinking work: How approach and avoidance features of cognitive crafting are linked with job crafting behaviors and work engagement. *Journal of Management & Organization*, 30(5), 1499–1519.
- Costantini, A., Demerouti, E., Ceschi, A., & Sartori, R. (2022). Implementing job crafting behaviors: Exploring the effects of a job crafting intervention based on the theory of planned behavior. *The Journal of Applied Behavioral Science*, 58(3), 477–512.
- Crum, A. J., & Langer, E. J. (2007). Mind-set matters: Exercise and the placebo effect. *Psychological Science*, 18(2), 165–171. <https://doi.org/10.1111/j.1467-9280.2007.01867.x>
- De Beer, L. T., Tims, M., & Bakker, A. B. (2016). Job crafting and its impact on work engagement and job satisfaction in mining and manufacturing. *South African Journal of Economic and Management Sciences*, 19(3), 400–412. <https://doi.org/10.4102/sajems.v19i3.1481>
- De Spiegelaere, S., Van Gyes, G., & Van Hootehem, G. (2016). Not all autonomy is the same. Different dimensions of job autonomy and their relation to work engagement & innovative work behavior. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 26(4), 515–527. <https://doi.org/10.1002/hfm.20666>
- Debus, M. E., Gross, C., & Kleinmann, M. (2020). The power of doing: How job crafting transmits the beneficial impact of autonomy among overqualified employees. *Journal of Business and Psychology*, 35(3), 317–331.
- Debus, M. E., Körner, B., Wang, M., & Kleinmann, M. (2023). Reacting to perceived overqualification: Uniting strain-based and self-regulatory adjustment reactions and the moderating role of formal work arrangements. *Journal of Business and Psychology*, 38(2), 411–435.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Demerouti, E., Bakker, A. B., & Gevers, J. M. (2015). Job crafting and extra-role behavior: The role of work engagement and flourishing. *Journal of Vocational Behavior*, 91, 87–96.
- Dettmers, J., & Bredehöft, F. (2020). The ambivalence of job autonomy and the role of job design demands. *Scandinavian Journal of Work and Organizational Psychology*, 5(1), 8. <https://doi.org/10.16993/sjwop.81>
- Dormann, C., & Griffin, M. A. (2015). Optimal time lags in panel studies. *Psychological Methods*, 20(4), 489–505. <https://doi.org/10.1037/met0000041>
- Ebert, T., & Bipp, T. (2022). Tomayto, Tomahto? An empirical comparison and integration of job crafting perspectives. *European Journal of Psychological Assessment*, 38(4), 307. <https://doi.org/10.1027/1015-5759/a000669>
- Fisher, I., & Costa, P. (2023). Job crafting after making mistakes: Can leadership be an obstacle? *The Learning Organization*, 30(4), 465–479. <https://doi.org/10.1108/TLO-05-2022-0051>
- Gabriel, A. S., Daniels, M. A., Diefendorff, J. M., & Greguras, G. J. (2015). Emotional labor actors: A latent profile analysis of emotional labor strategies. *Journal of Applied Psychology*, 100(3), 863. <https://doi.org/10.1037/a0037408>
- Geldenhuis, M., Bakker, A. B., & Demerouti, E. (2021). How task, relational and cognitive crafting relate to job performance: A weekly diary study on the role of meaningfulness. *European Journal of Work and Organizational Psychology*, 30(1), 83–94. <https://doi.org/10.1080/1359432X.2020.1825378>

- Gollwitzer, P. M., & Sheeran, P. (2006). Implementation intentions and goal achievement: A meta-analysis of effects and processes. *Advances in Experimental Social Psychology*, 38, 69–119.
- Gordon, H. J., Demerouti, E., Le Blanc, P. M., Bakker, A. B., Bipp, T., & Verhagen, M. A. (2018). Individual job redesign: Job crafting interventions in healthcare. *Journal of Vocational Behavior*, 104, 98–114.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3–34. <https://doi.org/10.1016/j.riob.2008.04.002>
- Harju, L. K., Kaltiaainen, J., & Hakanen, J. J. (2021). The double-edged sword of job crafting: The effects of job crafting on changes in job demands and employee well-being. *Human Resource Management*, 60(6), 953–968. <https://doi.org/10.1002/hrm.22054>
- Hirschi, A., & Valero, D. (2017). Chance events and career decidedness: Latent profiles in relation to work motivation. *The Career Development Quarterly*, 65(1), 2–15. <https://doi.org/10.1002/cdq.12076>
- Ho, K. L., Mäkikangas, A., Kerkiseck, P., Morstatt, A. I., de Bloom, J., & Bauer, G. F. (2024). Job and off-job crafting profiles: Time-lagged relationships with job, home and personal resources and well-being outcomes. *Journal of Occupational and Organizational Psychology*, 97(3), 952–976. <https://doi.org/10.1111/joop.12506>
- Hojtink, H., Gu, X., & Mulder, J. (2019). Bayesian evaluation of informative hypotheses for multiple populations. *British Journal of Mathematical & Statistical Psychology*, 72(2), 219–243. <https://doi.org/10.1111/bmsp.12145>
- Holman, D., Escaffi-Schwarz, M., Vasquez, C. A., Irmer, J. P., & Zapf, D. (2024). Does job crafting affect employee outcomes via job characteristics? A meta-analytic test of a key job crafting mechanism. *Journal of Occupational and Organizational Psychology*, 97(1), 47–73. <https://doi.org/10.1111/joop.12450>
- Hommelhoff, S., Weseler, D., & Niessen, C. (2021). The role of cognitive job crafting in the relationship between turnover intentions, negative affect, and task mastery. *Anxiety, Stress, & Coping*, 34(6), 704–718. <https://doi.org/10.1080/10615806.2021.1892653>
- Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53–60. fv2d
- Horan, K. A., Nakahara, W. H., DiStaso, M. J., & Jex, S. M. (2020). A review of the challenge-hindrance stress model: Recent advances, expanded paradigms, and recommendations for future research. *Frontiers in Psychology*, 11, 560346. <https://doi.org/10.3389/fpsyg.2020.560346>
- Hu, Q., Taris, T. W., Dollard, M. F., & Schaufeli, W. B. (2020). An exploration of the component validity of job crafting. *European Journal of Work and Organizational Psychology*, 29(5), 776–793. <https://doi.org/10.1080/1359432X.2020.1756262>
- Huang, J. L., Curran, P. G., Keeney, J., Poposki, E. M., & DeShon, R. P. (2012). Detecting and deterring insufficient effort responding to surveys. *Journal of Business and Psychology*, 27(1), 99–114. <https://doi.org/10.1080/1359432X.2020.1756262>
- Hulshof, I. L., Demerouti, E., & Le Blanc, P. M. (2020). Reemployment crafting: Proactively shaping one's job search. *Journal of Applied Psychology*, 105(1), 58–79. <https://doi.org/10.1037/apl0000419>
- Kilic, E., & Kitapci, H. (2023). Cognitive job crafting: An intervening mechanism between intrinsic motivation and affective well-being. *Management Research Review*, 46(7), 1043–1058. <https://doi.org/10.1108/MRR-08-2021-0605>
- Kim, H., Im, J., & Qu, H. (2018). Exploring antecedents and consequences of job crafting. *International Journal of Hospitality Management*, 75, 18–26. <https://doi.org/10.1016/j.ijhm.2018.02.014>
- Knight, C., Tims, M., Gawke, J., & Parker, S. K. (2021). When do job crafting interventions work? The moderating roles of workload, intervention intensity, and participation. *Journal of Vocational Behavior*, 124, 103522. <https://doi.org/10.1016/j.jvb.2020.103522>
- Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1), 1–49. <https://doi.org/10.1111/j.1744-6570.1996.tb01790.x>
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individual's fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2), 281–342. <https://doi.org/10.1111/j.1744-6570.2005.00672.x>
- Lanza, S. T., Tan, X., & Bray, B. C. (2013). Latent class analysis with distal outcomes: A flexible model-based approach. *Structural Equation Modeling: A Multidisciplinary Journal*, 20(1), 1–26. <https://doi.org/10.1080/10705511.2013.742377>

- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer publishing company.
- Lazazzara, A., Tims, M., & de Gennaro, D. (2020). The process of reinventing a job: A meta-synthesis of qualitative job crafting research. *Journal of Vocational Behavior*, 116, 103267. <https://doi.org/10.1016/j.jvb.2019.01.001>
- Leana, C., Appelbaum, E., & Shevchuk, I. (2009). Work process and quality of care in early childhood education: The role of job crafting. *Academy of Management Journal*, 52(6), 1169–1192. <https://doi.org/10.5465/amj.2009.47084651>
- Lichtenthaler, P. W., & Fischbach, A. (2019). A meta-analysis on promotion- and prevention-focused job crafting. *European Journal of Work and Organizational Psychology*, 28(1), 30–50. <https://doi.org/10.1080/1359432X.2018.1527767>
- Li, P., Peeters, M. C., Taris, T. W., & Zhang, Y. (2021). In the eye of the beholder: Challenge and hindrance appraisals of work characteristics and their implications for employee's well-being. *Frontiers in Psychology*, 12, 708309.
- Lopper, E., Dettmers, J., & Hoppe, A. (2022). Examining nonlinear effects of crafting social resources on work engagement—the moderating role of exhaustion. *Occupational Health Science*, 6(4), 585–604. <https://doi.org/10.1007/s41542-022-00124-w>
- Lopper, E., Horstmann, K. T., & Hoppe, A. (2024). The approach-avoidance job crafting scale: Development and validation of a measurement of the hierarchical structure of job crafting. *Applied Psychology*, 73, 93. <https://doi.org/10.1111/apps.12466>
- Lu, C.-Q., Wang, H.-J., Lu, J.-J., Du, D.-Y., & Bakker, A. B. (2014). Does work engagement increase person–job fit? The role of job crafting and job insecurity. *Journal of Vocational Behavior*, 84(2), 142–152. <https://doi.org/10.1016/j.jvb.2013.12.004>
- Maassen, G. H., & Bakker, A. B. (2001). Suppressor variables in path models: Definitions and interpretations. *Sociological Methods & Research*, 30(2), 241–270. <https://doi.org/10.1177/0049124101030002004>
- MacKinnon, J. G., Nielsen, M. Ø., & Webb, M. D. (2023). Cluster-robust inference: A guide to empirical practice. *Journal of Econometrics*, 232(2), 272–299. <https://doi.org/10.1016/j.jeconom.2022.04.001>
- Mäkikangas, A. (2018). Job crafting profiles and work engagement: A person-centered approach. *Journal of Vocational Behavior*, 106, 101–111. <https://doi.org/10.1016/j.jvb.2018.01.001>
- Mäkikangas, A., & Schaufeli, W. (2021). A person-centered investigation of two dominant job crafting theoretical frameworks and their work-related implications. *Journal of Vocational Behavior*, 13, 103658. <https://doi.org/10.1016/j.jvb.2021.103658>
- Melo, N., Dourado, D., & Andrade, J. (2021). Reclaiming cognitive crafting: An integrative model of behavioral and cognitive practices in job crafting. *International Journal of Organizational Analysis*, 29(5), 1302–1320.
- Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91(6), 1321–1339. <https://doi.org/10.1037/0021-9010.91.6.1321>
- Muthén, L.K. and Muthén, B.O. (2013) Mplus (Version 7.11) [Computer Software]. Author, Los Angeles.
- Muthén, B. O., & Muthén, L. K. (2000). Integrating person-centered and variable-centered analyses: Growth mixture modeling with latent trajectory classes. *Alcoholism, Clinical and Experimental Research*, 24, 882–891. <https://doi.org/10.1111/j.1530-0277.2000.tb02070.x>
- Niessen, C., Weseler, D., & Kostova, P. (2016). When and why do individuals craft their jobs? The role of individual motivation and work characteristics for job crafting. *Human Relations*, 69(6), 1287–1313. <https://doi.org/10.1177/0018726715610642>
- Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling: A Multidisciplinary Journal*, 14(4), 535–569. <https://doi.org/10.1080/10705510701575396>
- Nylund-Gibson, K., & Choi, A. Y. (2018). Ten frequently asked questions about latent class analysis. *Translational Issues in Psychological Science*, 4(4), 440–461. <https://doi.org/10.1037/tps0000176>
- Ohly, S., & Fritz, C. (2010). Work characteristics, challenge appraisal, creativity, and proactive behavior: A multi-level study. *Journal of Organizational Behavior*, 31(4), 543–565.
- Oldham, G. R., & Hackman, J. R. (2010). Not what it was and not what it will be: The future of job design research. *Journal of Organizational Behavior*, 31(2–3), 463–479. <https://doi.org/10.1002/job.678>

- Oprea, B. T., Barzin, L., Virgă, D., Iliescu, D., & Rusu, A. (2019). Effectiveness of job crafting interventions: A meta-analysis and utility analysis. *European Journal of Work and Organizational Psychology*, 28(6), 723–741. <https://doi.org/10.1080/1359432X.2019.1646728>
- Payne, S. C., Youngcourt, S. S., & Beaubien, J. M. (2007). A meta-analytic examination of the goal orientation nomological net. *Journal of Applied Psychology*, 92(1), 128–150. <https://doi.org/10.1037/0021-9010.92.1.128>
- Petrou, P., & Xanthopoulou, D. (2021). Interactive effects of approach and avoidance job crafting in explaining weekly variations in work performance and employability. *Applied Psychology: An International Review*, 70(3), 1345–1359. <https://doi.org/10.1111/apps.12277>
- Petrou, P., Demerouti, E., Peeters, M. C. W., Schaufeli, W. B., & Hetland, J. (2012). Crafting a job on a daily basis: Contextual correlates and the link to work engagement. *Journal of Organizational Behavior*, 33(8), 1120–1141. <https://doi.org/10.1002/job.1783>
- Rudolph, C. W., Katz, I. M., Lavigne, K. N., & Zacher, H. (2017). Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *Journal of Vocational Behavior*, 102(6), 112–138. <https://doi.org/10.1016/j.jvb.2017.05.008>
- Schachler, V., Epple, S. D., Clauss, E., Hoppe, A., Slem, G. R., & Ziegler, M. (2019). Measuring job crafting across cultures: Lessons learned from comparing a German and an Australian sample. *Frontiers in Psychology*, 10, 991. <https://doi.org/10.3389/fpsyg.2019.00991>
- Slem, G. R., & Vella-Brodick, D. A. (2013). The job crafting questionnaire: A new scale to measure the extent to which employees engage in job crafting. *International Journal of Well-Being*, 3(2), 126–146. <https://doi.org/10.5502/ijw.v3i2.1>
- Spurk, D., Hirschi, A., Wang, M., Valero, D., & Kauffeld, S. (2020). Latent profile analysis: A review and “how to” guide of its application within vocational behavior research. *Journal of Vocational Behavior*, 120, 103445. <https://doi.org/10.1016/j.jvb.2020.103445>
- Stawski, R. S., MacDonald, S. W. S., & Sliwinski, M. J. (2015). Measurement burst design. In S. K. Whitbourne (Ed.), *The Encyclopedia of Adulthood and Aging* (pp. 1–5). hb7b
- Stegmann, S., van Dick, R., Ullrich, J., Charalambous, J., Menzel, B., Egold, N., & Wu, T.T.-C. (2010). Der Work Design Questionnaire: Vorstellung und erste Validierung einer deutschen Version. *Zeitschrift für Arbeits- und Organisationspsychologie*, 54(1), 1–28. <https://doi.org/10.1026/0932-4089/a000002>
- Stiglbauer, B., & Kovacs, C. (2018). The more, the better? Curvilinear effects of job autonomy on well-being from vitamin model and PE-fit theory perspectives. *Journal of Occupational Health Psychology*, 23(4), 520. <https://doi.org/10.1037/ocp0000107>
- Teng, E., Zhang, L., & Lou, M. (2020). Does approach crafting always benefit? The moderating role of job insecurity. *The Journal of Psychology*, 154(6), 426–445. <https://doi.org/10.1080/00223980.2020.1774484>
- Tims, M., & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology*, 36(2), 1–9. <https://doi.org/10.4102/sajip.v36i2.841>
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80(1), 173–186. <https://doi.org/10.1016/j.jvb.2011.05.009>
- Tims, M., Bakker, A. B., & Derks, D. (2015). Job crafting and job performance: A longitudinal study. *European Journal of Work and Organizational Psychology*, 24(6), 914–928. <https://doi.org/10.1080/1359432X.2014.969245>
- Tims, M., Derks, D., & Bakker, A. B. (2016). Job crafting and its relationships with person–job fit and meaningfulness: A three-wave study. *Journal of Vocational Behavior*, 92, 44–53. <https://doi.org/10.1016/j.jvb.2015.11.007>
- van de Schoot, R., Lugtig, P., & Hox, J. (2012). A checklist for testing measurement invariance. *European Journal of Developmental Psychology*, 9(4), 486–492. <https://doi.org/10.1080/17405629.2012.686740>
- van den Heuvel, M., Demerouti, E., & Peeters, M. C. W. (2015). The job crafting intervention: Effects on job resources, self-efficacy, and affective well-being. *Journal of Occupational and Organizational Psychology*, 88(3), 511–532. <https://doi.org/10.1111/joop.12128>
- Van Lissa, C. J., Beinhauer, L., Branje, S., & Meeus, W. H. J. (2023). Using machine learning to identify early predictors of adolescent emotion regulation development. *Journal of Research on Adolescence*, 33(3), 870–889. <https://doi.org/10.1111/jora.12845>
- van Wingerden, J., & Poell, R. F. (2017). Employees’ Perceived Opportunities to Craft and In-Role Performance: The Mediating Role of Job Crafting and Work Engagement. *Frontiers in Psychology*, 8, 1876. <https://doi.org/10.3389/fpsyg.2017.01876>

- van Wingerden, J., Bakker, A. B., & Derks, D. (2017a). Fostering employee well-being via a job crafting intervention. *Journal of Vocational Behavior*, *100*, 164–174. <https://doi.org/10.1016/j.jvb.2017.03.008>
- van Wingerden, J., Bakker, A. B., & Derks, D. (2017b). The longitudinal impact of a job crafting intervention. *European Journal of Work and Organizational Psychology*, *26*(1), 107–119.
- Vermunt, J. K. (2010). Latent class modeling with covariates: Two improved three-step approaches. *Political Analysis*, *18*(4), 450–469. <https://doi.org/10.2307/25792024>
- Vogel, R. M., Rodell, J. B., & Lynch, J. W. (2016). Engaged and productive misfits: How job crafting and leisure activity mitigate the negative effects of value incongruence. *Academy of Management Journal*, *59*(5), 1561–1584. <https://doi.org/10.5465/amj.2014.0850>
- Wang, M., & Hanges, P. J. (2011). Latent class procedures: Applications to organizational research. *Organizational Research Methods*, *14*(1), 24–31.
- Wang, Z., Wang, Y., Jex, S. M., Liu, L., & Cao, J. (2024). When does cognitive crafting matter more in enhancing employee thriving at work? The moderating role of skill variety and job autonomy. *Stress and Health*, *40*(3), e3323.
- Weseler, D., & Niessen, C. (2016). How job crafting relates to task performance. *Journal of Managerial Psychology*, *31*(3), 672–685. <https://doi.org/10.1108/JMP-09-2014-0269>
- Wiley, J., & Jarosz, A. F. (2014). What are the odds? A practical guide to computing and reporting bayes factors. *The Journal of Problem Solving*, *7*(1), 2. <https://doi.org/10.7771/1932-6246.1167>
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, *26*(2), 179–201. <https://doi.org/10.2307/259118>
- Wrzesniewski, A., Dutton, J. E., & Debebe, G. (2003). Interpersonal sensemaking and the meaning of work. *Research in Organizational Behavior*, *25*, 93–135. [https://doi.org/10.1016/S0191-3085\(03\)25003-6](https://doi.org/10.1016/S0191-3085(03)25003-6)
- Wrzesniewski, A., LoBuglio, N., Dutton, J. E., & Berg, J. M. (2013). Job crafting and cultivating positive meaning and identity in work. In *Advances in positive organizational psychology* (Vol. 1, pp. 281–302). Emerald Group Publishing Limited.
- Zampetakis, L. A. (2021). Does an overall job crafting dimension exist? *European Journal of Psychological Assessment*, *38*(1), e15025. <https://doi.org/10.1016/j.heliyon.2023.e15025>
- Zampetakis, L. A. (2023). Employees' fear at work, job crafting, and work engagement on a daily basis: The case for fear of COVID-19. *Applied Psychology*, *72*(2), 535–558. <https://doi.org/10.1111/apps.12388>
- Zhang, F., & Parker, S. K. (2019). Reorienting job crafting research: A hierarchical structure of job crafting concepts and integrative review. *Journal of Organizational Behavior*, *40*(2), 126–146. <https://doi.org/10.1002/job.2332>
- Zhang, F., & Parker, S. K. (2022). Reducing demands or optimizing demands? *Effects of cognitive appraisal and autonomy on job crafting to change one's work demands*, *European Journal of Work and Organizational Psychology*, *31*(5), 641–654. <https://doi.org/10.1080/1359432X.2022.2032665>
- Zhang, F., Tims, M., & Parker, S. K. (2024). Combinations of approach and avoidance crafting matter: Linking job crafting profiles with proactive personality, autonomy, work engagement, and performance. *Journal of Organizational Behavior*. <https://doi.org/10.1002/job.2836>

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Authors and Affiliations

Thea Ebert^{1,2}  · Tanja Bipp¹ · Maike E. Debus³

✉ Thea Ebert
thea.ebert@hs-aalen.de

¹ Heidelberg University, Heidelberg, Germany

² Aalen University, Beethovenstraße 1, 73430 Aalen, Germany

³ University of Neuchâtel, Neuchâtel, Switzerland