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Altruistic Work Values' Relevance for Organisational Commitment in Germany**

Abstract

Work values characterise employees' goals in organisations across situations and influence employees' work behaviour. Due to demographic change and the shortage of skilled workers in many industrialised countries, the importance of organisational commitment increases. Building on previous research on the value-commitment relation, we develop hypotheses on relationships of intrinsic, extrinsic and especially altruistic work values (which to date have seen little research) with affective, normative and continuance commitment. Based on an analysis of employee data from Germany (N=1,978), we find positive effects of the presence of altruistic work values on all types of commitment. Employees with strong altruistic work values are particularly loyal and organisation-oriented. We argue that the pure consideration of intrinsic and extrinsic work values largely and unjustifiably excludes the social orientation of employees at work, thereby squandering organisational development potential. Taking into account employees' work values and particularly offering opportunities to live altruistic work values can be seen as a potential for increasing employees' organisational commitment.

Keywords: altruistic work values, organisational commitment, work values, social component, employee retention
(JEL: M12, M50, M54)

Introduction

In light of demographic change and the associated shortage of skilled workers in industrial countries, employee retention is becoming increasingly important (Burke & Ng, 2006; McMullin et al., 2004). Further, companies can incur high costs, particularly owing to high fluctuation in key areas if positions remain vacant,

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resulting in production losses if qualified employees and, therefore, their expertise migrate and high recruitment and/or training costs associated with a job (Burke & Ng, 2006; McMullin et al., 2004; Salzmann et al., 2010). At the same time, this shortage of skilled workers intensifies the competition for qualified employees while the opportunities for employees to leave the company improve (Guhlemann, 2014). Thus, retaining qualified employees in the long term is becoming more of a concern for organisations.

One key aspect that has been shown to have a significant impact on employee retention is organisational commitment, describing employees' perceived connectedness and loyalty to the organisation they work for (Allen & Meyer, 1990; Meyer et al., 2002). Previous research revealed that besides organisational factors such as HRM practices and leadership style (Haque et al., 2019; Sendoglu et al., 2013), personal characteristics play a central role in shaping organisational commitment, ranging from demographics such as gender and age (Brinck et al., 2020) and the big five personality traits (Spagnoli & Caetano, 2012) to employees' career development (Weng et al., 2010) and individual work values (Froese & Xiao, 2012; Oliver, 1990). Although the overall causal relation between work values and organisational commitment has been addressed in and approved by a considerable number of research studies so far, current findings in that field are rather limited in their explanation power and degree of detail. Research to date often considers general values rather than work-specific values (e.g. Cohen, 2009), although concrete concepts and instruments for defining and measuring work values are available and broadly validated and/or focus merely on particular intrinsic and extrinsic work values (e.g. Froese & Xiao, 2012; Putti et al., 1989). Furthermore, many studies measure organisational commitment as a unidimensional construct (e.g. Elizur, 1996; Elizur & Koslowsky, 2001) or only integrate the affective commitment component in their investigations (e.g. Cohen & Shamai, 2010; Howell et al., 2012; Oliver, 1990). These differences in research approach and procedure have generated ambiguous results so far (Cohen & Liu, 2011; Cohen & Shamai, 2010; Kidron, 1978) and highlight the need for further investigation in that field of interest.

Current findings in work value research state that the relevance of particular value types has significantly changed: A study by Brinck et al. (2020) reveals that in Germany, the relevance of altruistic work values has increased over the past decades, while the relevance of extrinsic work values has declined and the relevance of intrinsic work values has remained constant. Despite these relevant implications regarding the increasing relevance of socially oriented work values, it is surprising that further research on altruistic work values and their potential influence on work-related outcomes such as organisational commitment is lacking. The scarcity of management research on the relation between altruistic work values and organisational commitment is also remarkable in light of rising discussions on so-called *new work*, a broader consideration of what employees really want in their work contexts (Bergmann, 2019; Moll, 2021) and an increased focus on meaning, purpose

and self-actualisation in management research and corporate practice (Cartwright & Holmes, 2006).

With reference to the presented research gap, our paper takes a differential approach, addressing the overall research question of whether certain types of employees' work values exhibit different relations with the three dimensions of organisational commitment. In particular, we address the question of how the presence of altruistic work values may influence affective, continuance and normative organisational commitment. To generate a more comprehensive picture, we also examine the effects of intrinsic and extrinsic work values on the three commitment forms. By taking this research focus, we extend current insights about the relation between altruistic work values, which are, until today, highly limited. Exceptions are studies by McCarthy et al. (2021) on public service motivation and affective commitment, Giauque and Varone (2019) on altruistic work opportunities and general organisational commitment and Ahiauzu and Asawo (2010) on altruistic love and work commitment.

Important to note is that several studies investigate the interplay between individual and organisational work values (i.e. value congruence) and its relation to work-related outcomes (e.g. Abbott, 2005; Finegan, 2000; Howell et al., 2012; Lawrence & Lawrence, 2009). While this view tends to incorporate a motivational facet based on the fact that individuals' work values are being reflected by the respective organisation or not, we decided to take an employee-centred approach and consider individual work values as an integral aspect of employee typification.

We derive hypotheses based on current evidence on the relationship between work values and organisational commitment and examine the relationships using a dataset from Germany (N=1,978). After outlining the basic concepts of work values and organisational commitment, we derive hypotheses on the relationships between work value types and the three organisational commitment forms. We then present our research sample and methodology. Finally, we show and discuss our findings, concluding with our study's implications.

Theoretical Foundation and Hypotheses

Work Values

Values operate at multiple levels of society as well as in different social contexts. (Kraatz et al., 2021). Consequently, they are of major relevance in the working context as well. Work values represent the specific class of values that are linked to work-related entities (Borg, 2010; Elizur et al., 1991). These entities can be objects, such as income or other material compensations, behaviours, such as social support, or situations, such as remote work for example (Elizur et al., 1991). Work values reflect the relative importance individuals attach to specific aspects of their working life and have a central influence on individuals' experience at work, encompassing

perceptions, attitudes and behaviours (Borg, 2010; Gahan & Abeysekera, 2009; Jin & Rounds, 2012). They serve as evaluative standards, determine the meaning people derive from their jobs and organisational experiences (Dose, 1997; George & Jones, 1997) and impact their career orientation and development (Judge & Bretz, 1992; Hirschi, 2010). As work values are derived from individuals' general value systems, a considerable body of management literature has drawn on general values rather than the work value concept so far. In our paper, we focus on work values, which are due to several reasons. First, the concept of work values is profoundly elaborated and has been used by a high number of studies so far. Second, our paper investigates the influence of individuals' values in the work context, which is why it is reasonable to set this particular focus with regard to the value concept as well. Third, we argue that the focus on work values (i.e. values with a direct link to work-related aspects such as income or development opportunities) and their effects on organisational commitment dimensions may lead to insights from which recommendations for corporate practice can directly be derived.

Although work values are relatively stable over time (Meglino & Ravlin, 1998; Rokeach, 1973; Vecernik, 2003), differences in work values across generations have been identified (e.g. Hansen & Leuty, 2012; Macky et al., 2008; Twenge et al., 2010). This seems reasonable as different events and experiences by different generations create different preferences, expectations and career-related goals (Twenge et al., 2010). Besides these inter-generational differences, inter-individual differences also exist. Verplanken and Holland (2002) argue that only a small set of central values actually drives individuals' motivation to behave in a certain way and introduce the term value centrality to describe particular values that have been incorporated as part of the self. According to the authors, employees thus differ in their individual sets of central work values that they have internalised as a fundamental part of their self-identity, leading to inter-individual differences in value-consistent preferences for specific work settings, career choices and behaviours at work (Jin & Rounds, 2012; Ros et al., 1999; Verplanken & Holland, 2002). This means that different types of work values do not exclude each other. Rather, it should be assumed that employees exhibit all forms of work values to some degree and that inter-individual differences in work values are manifested through different value prioritisations.

Self-determination theory makes a clear distinction between intrinsic and extrinsic work values (Jin & Rounds, 2012; Kasser, 2002), a basic categorisation that has been used by the majority of studies on work values so far. (Jin & Rounds, 2012; Lyons et al., 2009; Sagie et al., 1996). Intrinsic work values capture the importance ascribed to the rewarding nature of work itself and refer to aspects such as self-actualisation and a sense of achievement. In their meta-analysis, Jin and Rounds describe intrinsic work values as being "more directly related to the fulfilling of inherent psychological needs such as autonomy and competence" (Jin & Rounds, 2012, p. 2). The desire to live out creativity and be involved in creative as well as personal development at work characterises individuals with strong intrinsic work

values. It is this group of employees that considers interesting tasks, learning and growth at work to be particularly central (Elizur, 1984; Elizur et al., 1991; Gahan & Abeysekera, 2009; Hauff & Kirchner, 2015; Jin & Rounds, 2012; Johnson et al., 2012; Lyons et al., 2010; Ros et al., 1999). According to Jin & Rounds, extrinsic work values, on the other hand, reflect the importance attached to materialistic aspects of work, such as pay and benefits, as well as advantages that are perceived through job security and status (Jin & Rounds, 2011, p. 2). Employees with strong extrinsic work values may also see intrinsic values as important but identify themselves with materialistic compensations and security to a greater extent. (Elizur, 1984; Elizur et al., 1991; Hauff & Kirchner, 2015; Jin & Rounds, 2012; Johnson et al., 2012; Lyons et al., 2010; Ros et al., 1999).

Based on this fundamental classification of work values into intrinsic and extrinsic, research has discussed further types of work values, such as social work values (e.g. good relationships with colleagues and superiors) and altruistic work values (e.g. making a contribution to society) (Cennamo & Gardner, 2008; Elizur et al., 1991; Jin & Rounds, 2012; Lyons et al., 2010; Ros et al., 1999). The consideration of additional forms of work values with a more socially oriented focus thus questions the former, dualistic differentiation, highlighting that employees may be driven by values that go beyond self-directed benefits.

Due to the proven increase in the importance of altruistic work values over the past decades (Brinck et al., 2020) and the low number of research studies investigating the concrete link between altruistic work values and work-related outcomes, we decided to pay particular attention to this set of socially oriented work values. Altruistic work values refer to the importance of humanity in work situations and "involve the desire to help others and make a contribution to society (Lyons et al., 2010, p. 973). Employees with strong altruistic work values build their self-identity on and derive meaning from creating benefits for colleagues, communities or society as a whole (Brinck et al., 2020; Cennamo & Gardner, 2008; Hauff & Kirchner, 2015; Jin & Rounds, 2012; Lyons et al., 2010; Ros et al., 1999).

Organisational Commitment

Previous studies have revealed multifaceted effects of individuals' work values on work-related outcomes, including work behaviours, e.g. decision-making (Ravlin & Meglino, 1987) and creativity (Kyvik, 2012) and work attitudes such as job satisfaction (Knoop, 1994; Watson & Maiksins, 1991) and organisational commitment (Cohen & Liu, 2011; Elizur & Koslowsky, 2001; Finegan, 2000; Putti et al., 1989).

Organisational commitment describes an individual's attitude that refers to the perceived relationship with the respective organisation and is reflected in certain behaviours at work (Cohen & Liu, 2011; Meyer & Allen, 1991). High levels of organisational commitment do not only manifest themselves in mere loyalty to the organisation but in an active identification with and personal adoption of

organisational goals and values, a willingness to make a personal contribution to the organisation and a desire to remain with the organisation (Mowday et al., 1979). Research to date has emphasised the functional relationship between individual values and commitment, as values influence the attention to and the perception of situations (Cohen & Liu, 2011; Meyer & Allen, 1992), thus affecting the extent to which people feel connected to the organisation they work for. Based on this, we hypothesise that employees' individual work values have an impact on their organisational commitment.

Nowadays, there is a discussion about organisational commitment's multidimensionality, derived from the notion that employees vary in their psychological states and their approach towards their organisation (Allen & Meyer, 1990). A frequently used classification divides the construct into affective commitment (the desire to stay with the company), normative commitment (a feeling of obligation towards the company), and continuance commitment (a rationally derived need to stay with the company). These three commitment dimensions do not exclude each other but can be mutually present to different degrees (Allen & Meyer, 1990; Franke & Felfe, 2008; Meyer & Allen, 1991).

Affective commitment is reflected by an emotional attachment to the organisation, a strong acceptance of and identification with the organisation's values and goals, the willingness to make a special contribution to the organisation and the desire to remain with the organisation (Allen & Meyer, 1990; Meyer & Allen, 1991). Employees with high levels of affective commitment enjoy their jobs and being part of the organisation they work for (Allen & Meyer, 1990). They have a very positive image of the organisation, are deeply involved and therefore voluntarily commit themselves to the organisation (Meyer & Allen, 1991; Meyer et al., 2002).

Normative commitment refers to the employee's perceived moral obligation to stay in the organisation, for instance, if the employer has paid for vocational training, thus expressing trust in the employee to stay with the organisation. As a consequence, the individual may perceive an obligation towards specific persons (e.g. co-workers or managers) in the organisation or towards the organisation as a whole, resulting in a morally derived decision to stay (Meyer & Allen, 1991).

Continuance commitment is developed on the basis of two central aspects: the magnitude and number of individual investments and the perceived absence of alternatives. Employees with high levels of continuance commitment decide to stay with the organisation after engaging in a rational decision-making process where previous investments (e.g. time and energy spent to master a job skill) and expected future benefits of staying in the job are contrasted, and the benefits outweigh the costs of changing the employer (Allen & Meyer, 1990; Meyer & Allen, 1991). In situations where better alternatives are present, these employees may thus decide to leave the organisation.

Work Values and Organisational Commitment

Several studies have examined the value-commitment relationship so far, which is reasonable due to the fact that values are ascribed to a central role in evaluating the employment organisation (Cohen & Shamai, 2010). Besides the effects of employees' individual work values on their organisational commitment, work values have been considered from a sociological perspective (i.e. cultural values influencing an individual), an organisational perspective (i.e. perceived organisational values) or in terms of a perceived value fit between individual and organisational values (i.e. perceived value congruence) (e.g. Abbott et al., 2005; Clugston et al., 2000; Cohen, 2007; Finegan, 2000; Fischer & Mansell, 2009; Gutierrez et al., 2012; Howell et al., 2012; Kirkman & Shapiro, 2001; Lawrence & Lawrence, 2009). In this paper, however, we apply an employee-centred approach in order to increase the understanding of potential antecedents of organisational commitment on the individual level.

Werkmeister's theory of values (1967) lays a theoretical foundation for the investigation of the value-commitment relation by describing individuals' commitment to an organisation as a manifestation of the value system that is central to the individuals' existence and self-identity (Kidron, 1978; Werkmeister, 1967). In general terms, this view has been empirically demonstrated in various studies, although the results regarding particular relations between (work) value types and different dimensions of organisational commitment are highly heterogeneous.

Studies that take into consideration employees' general values make common use of Schwartz's basic human values model, which considers ten different values in its latest version (Schwartz, 2012). A study by Cohen (2009) revealed that from these ten universal human values, the three values, stimulation and achievement (both representing intrinsic values) and benevolence (relatable to altruistic values), showed significant relations with organisational commitment. Cohen and Shamai (2010) also applied Schwartz's value model and particularly investigated the effects of general values on the affective dimension of organisational commitment. Only the two values, achievement and power, had significant effects on affective commitment, with achievement being negatively associated with affective commitment and power exhibiting positive effects on affective commitment. Another study by Cohen & Liu (2011) distinguished between the three dimensions of organisational commitment and proved that different values were associated with different commitment dimensions. The values conformity and benevolence showed significantly positive relations with affective organisational commitment, achievement was positively related to continuance organisational commitment and stimulation was positively associated with normative organisational commitment.

One of the first studies that considered particular work values in their relation to organisational commitment was conducted by Kidron (1978), who defined work values as the Protestant work ethic of the employees. The study results

highlight a significant positive relationship between work values and the moral part of organisational commitment (similar to normative commitment), while the part of organisational commitment related to rational cost-benefit analyses (similar to continuance commitment) did not show any associations with work values (Kidron, 1978). Bin Salahudin et al. (2016) took into account Islamic work ethics as work values and showed that they were positively related to all three dimensions of organisational commitment. A study by Putti (1989) considered both intrinsic and extrinsic work values in relation to organisational commitment and revealed that intrinsic work values (e.g. job involvement and upward striving) related more closely to organisational commitment than extrinsic work values (e.g. income). Oliver (1990) chose an alternative value categorisation and differentiated between instrumental, participatory and task values, showing that participatory values, which are characterised by a particularly altruistic focus, were strongly related to organisational commitment. Elizur (1996) came to the result that intrinsic work values such as independence, job interest and use of abilities had the strongest correlations with organisational commitment. A study by Elizur and Kolodowsky (2001) revealed similar results, underlining the relevance of intrinsic work values in the value-commitment relation. The presented findings highlight that work values do play a significant role in the formation of organisational commitment and that differences in the relations between particular work value types and organisational commitment forms exist. Additionally, the findings confirm that besides intrinsic and extrinsic work values, altruistic work values are worth integrating into future considerations as they reveal significant effects on individuals' organisational commitment. Nevertheless, current studies on the work value – organisational commitment relation reveal ambiguous results, which we assume to be due to high heterogeneity in the value sets and conceptualisations (unidimensional vs. three-dimensional) of organisational commitment.

Hypotheses Development

We base the development of our research hypotheses on the notion that the relationship between different value sets and the three dimensions of organisational commitment might be influenced by the particular perspective these value sets take. By integrating a higher-order perspective on the classification of work values, we lean on the argumentation by Schwartz and his theory of basic values (Schwartz, 2012). Although his model refers to general rather than work values, making an argumentative connection at this point seems reasonable due to the fact that the work value concept, with its particular focus on the work context, exhibits fundamental parallels to the overall concept of basic values. Schwartz differentiates between ten basic values, which he further classifies into a higher order categorisation (Schwartz, 2012). According to Schwartz, these four categories, openness to change, self-enhancement, conservation and self-transcendence, represent the underlying motivation related to the particular value (Schwartz, 2012). For instance,

the value achievement is classified as a value based on the underlying motivation of self-enhancement, while the value benevolence is connected to an individual's motivation to transcend the self by taking a socially oriented perspective. Having a closer look at these four categories, it is reasonable to further divide this higher-order value categorisation into a self-oriented (i.e. focusing primarily on oneself) and an other-oriented (i.e. focusing primarily on others) perspective. Referring to Schwartz, the two components, openness to change and self-enhancement would represent a rather self-oriented focus, while conservation and self-transcendence can be related to a focus on other people or society as a whole. Applying this perspective to our choice of work values, we argue that intrinsic and extrinsic work values are both primarily related to motivations and goals related to the self, while altruistic work values are primarily related to motivations and goals related to other people, the employing organisation and/or humanity in total.

Normative commitment results from the moral sense of obligation toward the company and its members. Such a sense of obligation can arise from social rules or traditions if they suggest a sense of commitment or loyalty to the company, thus requiring employees to follow a certain degree of conformity. However, normative commitment can also arise from a sense of moral obligation toward the company's mission if that mission serves society. It may also result from a sense of loyalty towards individual employees or teams, leading to the urge not to leave subordinates or workgroup members behind and thereby possibly expose them to a disadvantage. There might also be employees who feel that they have to give something back to the company, for instance, for the organisation's trust or investment in one's career.

What all these scenarios have in common is the relevance of a socially oriented perspective and altruistic values such as concern, humility and conformity. Moreover, Ahiauzu and Asawo (2010) argue that normative commitment is expressed by a certain degree of self-sacrifice, which they assume to be more pronounced in people with strong altruistic work values. Indeed, their study results approve of this assumption, revealing a positive relationship between altruistic love and normative commitment.

In line with these findings, we predict the evolution of normative commitment based on the particular presence of social orientation and altruistic work values, which we assume to enhance employees' sense of moral obligation towards the organisation to a much greater extent than intrinsic or extrinsic work values.

H1a: The stronger individuals' expression of altruistic work values, the higher, on average, their normative commitment.

H1b: Individuals with strong extrinsic work values do not exhibit higher levels of normative commitment on average.

H1c: Individuals with strong intrinsic work values do not exhibit higher levels of normative commitment on average.

In contrast to normative commitment, continuance commitment is characterised by employees' rationality and self-direction. Here, the individual weighs up the advantages of remaining in the company only for personal purposes. These personal advantages can be intrinsic in nature, such as the possibility of self-direction or the enjoyment of one's own work, or extrinsic, such as a high income, for example. Previous studies have shown that the intrinsic work values achievement, responsibility and work-life balance were positively related to continuance commitment (Cohen & Liu, 2011; Leszczynska, 2018).

We hypothesise that the evolution of continuance commitment is particularly based on work values with a personal focus, encompassing both intrinsic and extrinsic values. We further assume that altruistic work values do not significantly relate to continuance commitment, as we consider the selfless perspective of altruism to be opposite to the self-centred perspective of continuance commitment.

H2a: Individuals with strong altruistic work values do not exhibit higher levels of continuance commitment on average.

H2b: The stronger individuals' expression of extrinsic work values, the higher, on average, their continuance commitment.

H2c: The stronger individuals' expression of intrinsic work values, the higher, on average, their continuance commitment.

Affective commitment arises from the individual's strong acceptance of and identification with the organisation's values and goals and the resulting willingness to commit to the company and its vision. It strongly relates to employees' integration into a collective (i.e. an organisation) and pursuing organisational goals as one's own, aspects that go beyond employees' focus on themselves and can, therefore, be interpreted as expressions of self-transcendence (in line with Schwartz, 2012). In addition, affective commitment also comes along with a necessary subjection to organisational rules and norms. Cohen and Liu's (2011) findings support these propositions by revealing that the general values of benevolence (a self-transcending concern for the welfare of others in a particular in-group) and conformity (the inhibition of actions that may disrupt collective expectations or norms), both characterised by a strong altruistic focus, are positively related to affective commitment. Ahiauzu and Asawo (2010) further investigated the effect of altruistic love, encompassing altruistic values such as empathy and compassion, on organisational commitment. Their results showed that altruistic love, which enhances employees' emotional and psychological attachment to the organisation, was positively related to affective commitment (Ahiauzu & Asawo, 2010). Dehaghi et al. (2012) dedicated their conceptual paper to the potential relation between spiritual work values

and organisational commitment. They argue that spiritual work values, related to aspects such as contributing to society in a meaningful way, care, compassion and support of others – thus exhibiting strong relations to altruistic work values – are expected to be particularly related to the affective component of organisational behaviour.

We propose that affective organisational commitment requires employees to cultivate an attitude that focuses on the organisation as a collective entity rather than focusing on themselves, which we expect to be shown by the dominance of altruistic work values over intrinsic and extrinsic values. We thus predict the following relationships concerning affective commitment:

H3a: The stronger individuals' expression of altruistic work values, the higher, on average, their affective commitment.

H3b: Individuals with strong extrinsic work values do not exhibit higher levels of affective commitment on average.

H3c: Individuals with strong intrinsic work values do not exhibit higher levels of affective commitment on average.

Method and Data

Data

Based on a large employee survey, we collected an employee dataset with $N=1,974$ in Germany, according to a population-representative quota sampling by age and gender during October 2020, after the first relatively harmless corona wave in Germany. As we aim to generate insights about the relationship between individual work value types and organisational commitment dimensions across industries, we consider the relatively extensive sample of employees from a variety of different work sectors (e.g. craft, social, business and service industry) as being adequate to address our research question. By using a cross-industry sample, we ensure that potential self-selection processes do not influence our considered variables. Self-selection effects could be assumed in a sample with a majority of participants working in the nursing sector, for example, as employees engaging in care work are expected to be particularly driven by altruistic work values. The data collection was carried out using a panel data provider and an online questionnaire. The sample contains 952 women and 1,022 men with an average age of 45.12 years. We prepared and analysed our data using SPSS and show basic sample statistics in Table 1.

Measures

We collected altruistic, extrinsic, and intrinsic work values as three indexes using three-item constructs each, based on ISSP Research Group (2017), with a response scale between 1 (*feature is not important at all*) and 5 (*feature is very important*).

To measure altruistic work values, we asked *How important is a job that is useful for society?*, for instance. All three altruistic work value items refer to interpersonal relationships and making a larger contribution and, therefore, represent individual work values that are socially oriented. This focus on aspects related to the social environment at work and humanity as a whole justifies using the three items to measure altruistic values. For extrinsic work values, we used three items related to income, security and status (e.g. *How important is a job with high income?*). In line with our definition, we argue that these facets represent extrinsic work values as they describe advantages through external validation in the form of financial rewards, financial rewards, stability and recognition. Finally, we measured intrinsic work values by using three items referring to aspects such as professional development, autonomy and responsibility (e.g. *How important is a job with good opportunities for professional advancement?*). These work values can be defined as intrinsic, as they mirror aspects of the work experience that are directly connected to an inner need for development, striving and self-fulfilment.

We surveyed the three dimensions of organisational commitment with a 14-item survey instrument, according to Felfe et al. (2014). The instrument is based on Meyer and Allen's (1997) three-commitment model and their English commitment scale, which has been translated into German and adapted to the German working context. It consists of five-point Likert scales ranging from 1 (*does not apply at all*) to 5 (*fully applies*) and shows high internal consistency with Cronbach's alpha values ranging from 0.75 to 0.86 for the three subdimensions. The survey instrument has been used in several contexts so far (Berg, 2017; Miedaner et al., 2018; Pfaffinger et al., 2020; Seibt & Hager, 2019).

We then calculated indexes (arithmetic mean) on the items that form the three commitment types. For affective commitment, Felfe et al. (2014) provide five items, such as *I am proud to belong to this organisation*. Normative commitment also consists of five items such as *Many people who are important to me would not understand or would be disappointed if I left this organisation*. Continuance commitment, as the third dimension, is measured by four items, such as *Too much in my life would change if I left this organisation now*.

We included additional demographic control variables like age (in years), gender (male=0; female=1), and education level (according to items of the UNESCO Institute for Statistics, 2012) ranging from "No degree" to "PhD" and the number of persons living in the household. We also surveyed income according to EWCS (2015) Q105, contractual work time (hours per week), work contract (fixed-term=1, permanent-term=0), and company size (number of employees in the global organisation). This is necessary since previous studies have shown relationships between these variables, the relevance of work values and organisational commitment: Elizur (1984) and Furnham (1984) showed differences between male and female employees regarding the importance of different work values. Further, Elizur

and Koslowsky (2001) showed that gender moderated the relationship between work values and organisational commitment. Research has shown relationships between age and values (Brinck et al., 2020) as well as age and organisational commitment (Cohen, 1993). Following Brinck et al.'s (2020) argumentation based on Maslow's hierarchy of needs (1943) and Inglehart's thesis about a change from materialistic to post-materialistic values (1971), there is a need to control for education, the number of persons in the household, work contract, contractual working time, and income. We also included the size of the company, as differences in the effect on the commitment between small, more family-oriented companies and large companies could be possible.

Analytical Strategy

To analyse our hypotheses, we used linear regression models. To focus on the three independent variables, we estimated three models: one with affective commitment as the dependent variable, one with the dependent variable continuance commitment and one with normative commitment. Further, we included the covariates of age, gender, education, number of persons in the household, contractual working time, work contract, company size, and income per year for all regression models. VIF indicators typically ranged around 1, and for no model did a VIF indicator exceed 2. All pairwise correlations were also rather low. No correlation exceeded 0.6, so we assume no relevant multicollinearity in the estimated models. Owing to heteroscedasticity in model 3, we calculated with robust standard errors. As recommended by Hayes et al. (2007) and Cribari-Neto et al. (2005), we used heteroscedasticity robust standard errors (HC3).

Table 1. Means, Standard Deviations, and Correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Affective commitment	3.43	1.03													
2. Continuance commitment	3.43	.95	.359**												
3. Normative commitment	2.83	1.00	.573**	.443**											
4. Altruistic work values	3.54	.98	.254**	.090**	.225**										
5. Extrinsic work values	3.71	.75	.116**	.172**	.140**	.251**									
6. Intrinsic work values	3.66	.80	.191**	.079**	.164**	.448**	.596**								
<i>Covariates</i>															
7. Age	45.12	11.89	.115**	.163**	.020	.062**	-.071**	-.012							
8. Gender	binary		-.049*	-.029	-.020	.095**	.051*	.014	-.186**						
9. Education	4.55	1.75	.049*	-.050*	-.056*	.048*	-.024	.106**	-.123**	-.001					
10. Number of persons in the household	1.29	.46	-.040	.023	-.028	-.013	-.109**	-.088**	.068**	-.066**	-.060**				
11. Contractual working time	34.36	35.78	-.008	.004	.007	-.010	.050*	.037	-.036	-.016	-.001	-.027			
12. Work contract	binary		-.051*	-.068**	-.045*	.039	-.003	.022	-.128**	.018	.067**	.059**	-.037		
13. Company size	5.87	2.25	-.076**	.041	-.130**	-.015	.142**	.018	-.078**	-.042	.017	-.016	.049*	.004	
14. Income	7.98	3.19	.148**	.068**	.033	.000	.159**	.185**	.030	-.254**	.276**	-.099**	.157**	-.173**	.267**

Notes: N=1,974, significance levels (two-tailed): * =5 %; ** =1 %.

Results

Our three models largely confirm our hypotheses (Table 2). Model 1 shows that employees high in altruistic work values exhibit higher levels of normative commitment (H1a), while employees high in intrinsic work values do not exhibit higher levels of normative commitment on average (H1c). However, our model revealed a positive relation between extrinsic work values and normative commitment, as opposed to hypothesis H1b. Thus, our analysis supports H1a and H1c but not H1b.

We analyse H2a to H2c in model 2. We find no support for H2a since, contrary to our expectation, employees high in altruistic work values averagely exhibit higher levels of continuance commitment. We find support for H2b, as individuals high in extrinsic work values show higher levels of continuance commitment on average. The results further show that individuals high in intrinsic work values averagely exhibit lower levels of continuance commitment. Thus, we cannot support H2c.

Our results support H3a to H3c, which are analysed in model 3. Individuals high in altruistic work values show higher affective commitment levels on average (H3a). Further, individuals with strong extrinsic work values do not exhibit higher levels of affective commitment (H3b), and individuals high in intrinsic work values do not show higher levels of affective commitment (H3c).

Table 2. Regression Coefficients, Standard Errors, and Model Summary Information for the Presumed Relationships

	Normative commitment ¹			Continuance commitment			Affective commitment		
	Coeff.	SE	p	Coeff.	SE	p	Coeff.	SE	p
Altruistic work values	.205	.026	<.001	.061	.024	.010	.233	.025	<.001
Extrinsic work values	.113	.041	.005	.256	.035	<.001	-.042	.038	.263
Intrinsic work values	.029	.039	.459	-.082	.036	.021	-.062	.038	.104
Age	-.002	.002	0.334	.013	.002	<.001	.007	.007	<.001
Gender	-.078	.046	0.090	.001	.044	0.984	-.050	.048	.286
Education	-.046	.013	0.000	-.015	.013	0.229	.003	.003	.816
Number of persons in the household	-.032	-.048	0.511	.070	.046	.126	-.052	.051	.286
Contractual working time	.000	.000	0.898	.000	-.001	.791	-.001	-.001	.223
Work contract	-.116	0.073	0.113	-.118	.067	0.076	-.073	.071	.302
Company size	-.070	0.011	0.000	.007	.010	0.483	-.051	.051	<.001
Income per year	.020	0.008	0.016	.013	.008	0.088	.049	.049	<.001
Constant	2.406	.223	<.001	1.838	.183	<.001	1.909	.195	<.001
			Adj. R ² = .091			Adj. R ² = .065			Adj. R ² = .103
			p=<.001			p=<.001			p=<.001

Notes: N=1,974, ¹HC3 method.

Discussion and Limitations

The analyses show that, in addition to intrinsic and extrinsic work values, altruistic work values have a key role with regard to employees' organisational commitment. Based on previous research findings in that field, we are able to theoretically derive links from the three work value types to the three dimensions of organisational commitment: normative, continuance and affective commitment. We can largely confirm our hypotheses with our quantitative data for Germany. Especially for altruistic work values, which are characterised by a social and community-oriented perspective, we find positive correlations with all three dimensions of organisational commitment in our data. We have expected this correlation for affective commitment, owing to its strong link to goals that go beyond one's own, and for normative commitment, due to its strong relation to traditions, rules and norms. However, we did not expect this positive correlation for continuance commitment. In our argumentation, we assume that continuance commitment is an expression of a self-centred way of thinking, which is related to values that focus on the individual. Although these assumptions are intuitive and perhaps correct, they may represent reality in a truncated way. One approach to explain the unexpected positive relation between altruistic work values and continuance commitment is to take into consideration Maslow's (1943) pyramid of human needs, which states that people differ in their levels of needs that are arranged hierarchically. The needs of a higher level only come into play when the needs of the lower level are at least largely satisfied. The lower levels contain basic existential material and security needs and are thus clearly self-centred needs, while needs that go beyond the immediate self come only into play at the higher levels. As a consequence, a socially oriented employee may nevertheless act egocentrically if his or her basic needs are not met to a sufficient degree since altruistic values only become salient after these existential needs have been satisfied. We assume that this pattern might be particularly relevant in industries with lower wages and lower qualification requirements, for employees with high social responsibilities and in professions with a lot of time pressure. In these cases, continuance thinking and acting at work may be necessary in order to have the resources to satisfy their basic needs.

We find that individuals with strong intrinsic work values do not exhibit higher levels of affective and normative commitment. In addition, our results debunk the assumed positive relationship between intrinsic work values and continuance commitment. Instead, we find a negative relation between high intrinsic work values and continuance commitment. One possible explanation is that individuals with high intrinsic work values and a preference for aspects such as self-fulfilment and autonomy might be highly self-centred and, thus, not develop any form of commitment to an organisation at all.

However, this does not seem to be the case for people with high extrinsic work values. Although their value structure is also characterised by a strong personal

focus, employees with high extrinsic work values are dependent on a solid relationship with an organisation for realising values such as (job) security or a high and steady income. Therefore, they may develop continuance commitment. Another unexpected finding is that high extrinsic work values are associated with higher normative commitment. Even if extrinsic work values are highly self-centred in nature, and normative commitment exhibits a strong focus on the collective, the goals of employees with strong extrinsic work values may arise from a similar source as aspects that lead to normative commitment. For instance, extrinsic work values such as high income and status are oriented toward goals with a clear personal focus, but these goals may arise from societal norms and traditions that precisely prescribe what leads to societal recognition and thus shape employees' extrinsic motivation.

To put our results into context, it is important to relate them to previous study results gained in this field of research. Although Cohen and Liu (2011) investigated the relationship between individual values and organisational commitment dimensions by taking a more generalistic approach based on Schwartz's value model, we recognise similar research findings. They found correlations between achievement (a value with a personal focus) and continuance commitment, as well as between conformity and benevolence (values with an altruistic focus) and affective commitment. These findings are largely in line with our results regarding continuance and affective commitment. Cohen and Liu (2011) also found a link between value stimulation (a value with a personal focus) and normative commitment, contrary to their hypotheses. The value stimulation has the highest overlap with intrinsic work values in our study. Contrary to Cohen and Liu (2011), we find no significant association between intrinsic work values and normative commitment.

In the process of hypothesis development, we considered work values on a more aggregate level than Cohen and Liu (2011) by associating them with a rather personal focus (i.e. intrinsic and extrinsic values) or a social focus (i.e. altruistic values). The decision to use this higher aggregation level in our argumentation is a methodological advancement in answering our research question and leads to clearer differences between different work value types and commitment types. Furthermore, using work values instead of general values to predict organisational commitment apparently produces more sophisticated and apparent results. This suggests that the use of specific constructs to capture work-specific values works better for predicting work- and organisation-specific outcomes such as organisational commitment.

By deriving our theoretical reasoning from previous, well-founded research based on general value theory, we decrease the risk of reversed causality. It could be argued, for example, that a particularly committed employee may show altruistic behaviour toward the company out of gratitude for good working conditions. However, value research precisely states that values are largely stable over time. As

a consequence, employees' values will not be shaped by short-term experiences in everyday working life, which is why we assume that we do not have any problems with reversed causality in our study.

Our research design only considers the mere presence of individual work values in its operationalisation and structure. We thus analyse the connection between work values and organisational commitment by taking a personality trait approach, based on the assumption that individual employees are characterised by differences in work values that are dominant due to a higher prioritisation, thus having an impact on work-related attitudes such as organisational commitment. While in this paper, we explicitly focus on one-to-one relations between particular work value types and commitment dimensions, another promising approach would be the investigation of different work value sets (i.e. combinations of different work value types) and their effect on commitment dimensions by making use of multinomial logistic regression analysis, for instance.

In addition, methodological approaches such as vignette analysis might be insightful instruments for future research in that field in order to increase the understanding of employees' beliefs, norms and priorities related to their work values. Vignette analysis confronts respondents with different hypothetical situations that consist of several core characteristics. As this method relies on realistic scenarios where several variables have to be traded off simultaneously by the respondents, it can be argued that vignette analysis allows for a more valid measurement of people's opinions as compared to direct questioning.

Research further highlights that the possibility of living individual values in the organisational context and accomplishing what employees' values state as desirable (value realisation) plays an important role in determining work-related outcomes (Kraatz et al., 2020). Moreover, many scholars conceptualise work values and their effects in relation to perceived value congruence, reflecting the extent of perceived fit between individual and organisational values. From this perspective, employees come to work with certain work values, but positive effects only manifest if they are empowered to translate their inherent values into value-based actions. According to Kraatz et al. (2020), values translated into action will lead to the development of "moral competence". For future research, it would be interesting to consider the association between work values (especially altruistic work values) and commitment dimensions as a function of value realisation or value congruence.

Another differentiation that we did not make in our study addresses the question of why employees may exhibit high altruistic work values. We argue that altruistic work values are characterised by a social focus, thus leading to higher levels of organisational commitment. Nevertheless, several scholars, such as Hitlin (2007), point out that prosocial values and behaviours improve an individual's self-perception and self-esteem, outcomes with a clear, personal focus. It might thus be that employees follow altruistic work values for reasons other than the selfless wish to

serve the collective, such as a perceived obligation or personal need to establish the self-image of an altruistic person. The question arises if employees with high levels of altruistic work values due to these alternative motives still exhibit higher degrees of organisational commitment.

Future research should further take into consideration situational factors that influence employees' ability to express and act according to their (altruistic) values at work. We assume that environmental factors (e.g. political instabilities), as well as organisation-specific factors (e.g. HR practices, leadership), may moderate the relation between individual work values (particularly altruistic values) and organisational commitment. Besides situational factors, personal characteristics might also play a role in this relationship. Previous research has highlighted the significant impact of the Big Five on organisational commitment (e.g. Spagnoli & Caetano, 2012). It thus seems reasonable to assume that personality traits might moderate the effect of individual work values on organisational commitment.

We investigated the relationship between work values and organisational commitment by analysing employee data from Germany. Based on the basic value model by Schwartz that was developed and refined by incorporating samples from several different countries (e.g. Schwartz et al., 2012), value research assumes that basic values are present across cultures. Nevertheless, studies have pointed out the influence of national culture on individual work values (e.g. Gahan & Abeysekera, 2009) as well as the effect of culture-level values on organisational commitment dimensions (e.g. Fischer & Mansell, 2009). For instance, greater collectivism is associated with higher normative commitment, and greater power distance leads to higher levels of continuance and normative commitment (Fischer & Mansell, 2009). Based on these findings, the generalisability of our results might be limited to cultures that exhibit values similar to Germany. It can particularly be assumed that altruistic work values depend on the culture's degree of collectivism vs. individualism, with employees from collectivistic cultures exhibiting higher levels of altruistic work values and behaviours (Yablo & Field, 2007; Zhu et al., 2021). Therefore, further research on the relation between (altruistic) work values and organisational commitment in other cultural settings is highly important in order to be able to make more well-founded statements regarding external validity and the generalisability of our results.

Lastly, the question arises whether and if so, which self-selection effects are relevant in relation to altruistic work values in different industries. For example, it is reasonable to assume that more altruistically oriented employees will work in helping professions, whereas employees with strong intrinsic or extrinsic work values are more likely to work in other industries. This could be addressed in future research by comparing the presence of altruistic work values across different work sectors.

Implications and Conclusion

Our study revealed a positive correlation between altruistic work values and all three dimensions of organisational commitment. Starting with the consideration of intrinsic and extrinsic work values, which omit the altruistic component of employees' values at work to a great extent, this is an important step forward: In this study, we were able to explicitly show the relationship between altruistic work values and the three dimensions of organisational commitment. According to our findings, it is this social orientation of employees that leads to high organisational commitment across all dimensions, while intrinsic work values with their strong personal focus on self-realisation do not enhance organisational commitment at all. This insight about the effect of altruistic work values on individuals' attitudes towards their organisation is of major importance for research as well as corporate practice.

For future research in the field of work values and their effects on work-related outcomes, we highly recommend the integration of a socially oriented perspective by considering altruistic work values in order to overcome the reduction of work values to intrinsic and extrinsic work values, a perspective that largely neglects employees' social and community-oriented perspectives, needs and motivations. Our findings highlight the underestimated relevance of altruistic work values on work-related attitudes and behaviours, a connection hardly studied so far. For this reason, we see great potential in further examining the effects of altruistic work values on individuals' attitudes and behaviours at work.

For corporate practice, it is important to note that employees high in altruistic work values exhibit high organisational commitment in all three dimensions. As a consequence, we can assume that employees high in altruistic work values have a tendency to be particularly loyal and organisation-focused. Generally speaking, these insights are of high value for corporate practice and HR practitioners in particular, as they show that an employee's altruistic value orientation can be related to beneficial outcomes for the organisation. At the same time, past studies highlighting the relevance of perceived value congruence between the self and the respective organisation and the opportunity to live one's individual values at work (value realisation) underline the responsibility of organisations to create a culture in which these individual values can be translated into actions. With regard to altruistic work values, this means that organisations are well advised to invest in the development of a corporate culture in which altruistic work values such as helping others or contributing to society can be lived. Based on our findings, it is reasonable to assume that organisations that create space for altruistic work values to be lived in the workplace may benefit from particularly committed employees who stay in the respective organisation based on an affective connection and a sense of loyalty towards the firm – aspects which can be understood as a competitive advantage in times of skilled worker shortages.

References

- Abbott, G. N., White, F. A., & Charles, M. A. (2005). Linking values and organizational commitment: A correlational and experimental investigation in two organizations. *Journal of Occupational and Organizational Psychology*, 78(4), 531–551. <https://doi.org/10.1348/096317905X26174>
- Ahiazu, A., & Asawo, S. P. (2010). Altruistic love culture and workers' commitment in the Nigerian manufacturing industry: A study in workplace spirituality. *Journal of Management Policy and Practice*, 11(5), 97–105.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1–18. <https://doi.org/10.1111/j.2044-8325.1990.tb00506.x>
- Berg, C. (2017). Zusammenhänge zwischen beruflicher Identität, Commitment und Arbeitszufriedenheit. *Zeitschrift für Arbeitswissenschaft*, 71, 169–178. <https://doi.org/10.1007/s41449-017-0066-7>
- Bergmann, F. (2019). *New work, new culture: Work we want and a culture that strengthens us*. Zero Books.
- Bin Salahudin, S. N., Binti Baharuddin, S. S., Abdullah, M. S., & Osman, A. (2016). The effect of Islamic work ethics on organizational commitment. *Procedia Economics and Finance*, 35, 582–590. [https://doi.org/10.1016/S2212-5671\(16\)00071-X](https://doi.org/10.1016/S2212-5671(16)00071-X)
- Borchert, M., & Landherr, G. (2009). The changing meanings of work in Germany. *Advances in Developing Human Resources*, 11(2), 204–217. <https://doi.org/10.1177/1523422309333762>
- Borg, I. (2010). A model for judgements of work values and job satisfaction. *Psychological Reports*, 107(2), 405–414. <https://doi.org/10.2466/01.07.21PR0.107.5.405-414>
- Brinck, K. L., Hauff, S., & Kirchner, S. (2020). Is there a new meaning of work? The how and why of a change in altruistic work values in Germany between 1989 and 2016. *Management Revue*, 31(2), 167–187. <https://doi.org/10.5771/0935-9915-2020-2-167>
- Burke, R. J., & Ng, E. (2006). The changing nature of work and organizations: Implications for human resource management. *Human Resource Management Review*, 16(2), 86–94. <https://doi.org/10.1016/j.hrmr.2006.03.006>
- Cartwright, S., & Holmes, N. (2006). The meaning of work: The challenge of regaining employee engagement and reducing cynicism. *Human Resource Management Review*, 16(2), 199–208. <https://doi.org/10.1016/j.hrmr.2006.03.012>
- Cennamo, L., & Gardner, D. (2008). Generational differences in work values, outcomes and person-organisation values fit. *Journal of Managerial Psychology*, 23(8), 891–906. <https://doi.org/10.1108/02683940810904385>
- Clugston, M., Howell, J. P., & Dorfman, P. W. (2000). Does cultural socialization predict multiple bases and foci of commitment? *Journal of Management*, 26(1), 5–30. <https://doi.org/10.1177/014920630002600106>
- Cohen, A. (1993). Age and tenure in relation to organizational commitment: A meta-analysis. *Basic and Applied Social Psychology*, 14(2), 143–159. https://doi.org/10.1207/s15324834bas1402_2
- Cohen, A. (2007). An examination of the relationship between commitments and culture among five cultural groups of Israeli teachers. *Journal of Cross-Cultural Psychology*, 38(1), 34–49. <https://doi.org/10.1177/0022022106295440>

- Cohen, A. (2009). A value based perspective on commitment in the workplace: An examination of Schwartz's basic human values theory among bank employees in Israel. *International Journal of Intercultural Relations*, 33(4), 332–345. <https://doi.org/10.1016/j.ijintrel.2009.04.001>
- Cohen, A., & Liu, Y. (2011). Relationships between in-role performance and individual values, commitment, and organizational citizenship behavior among Israeli teachers. *International Journal of Psychology : Journal International De Psychologie*, 46(4), 271–287. <https://doi.org/10.1080/00207594.2010.539613>
- Cohen, A., & Shamai, O. (2010). The relationship between individual values, psychological well-being, and organizational commitment among Israeli police officers. *Policing: An International Journal of Police Strategies & Management*, 33(1), 30–51. <https://doi.org/10.1108/13639511011020584>
- Cribari-Neto, F., Ferrari, S. L. P., & Oliveira, W. A. S. C. (2005). Numerical evaluation of tests based on different heteroskedasticity-consistent covariance matrix estimators. *Journal of Statistical Computation and Simulation*, 75(8), 611–628. <https://doi.org/10.1080/00949650410001729427>
- Dehagi, M. R., Goodarzi, M., & Arazi, Z. K. (2012). The effect of spiritual values on employees' organizational commitment and its models. *Procedia – Social and Behavioral Sciences*, 62, 159–166. <https://doi.org/10.1016/j.sbspro.2012.09.025>
- Dose, J. J. (1997). Work values: An integrative framework and illustrative application to organizational socialization. *Journal of Occupational and Organizational Psychology*, 70(3), 219–240. <https://doi.org/10.1111/j.2044-8325.1997.tb00645.x>
- Elizur, D. (1984). Facets of work values: A structural analysis of work outcomes. *Journal of Applied Psychology*, 69(3), 379–389. <https://doi.org/10.1037/0021-9010.69.3.379>
- Elizur, D., Borg, I., Hunt, R., Magyari Beck, I. (1991). The structure of work values: A cross cultural comparison. *Journal of Organizational Behavior*, 12, 21–38. <https://doi.org/10.1002/job.4030120103>
- Elizur, D., & Koslowsky, M. (2001). Values and organizational commitment. *International Journal of Manpower*, 22(7), 593–599. <https://doi.org/10.1108/01437720110408967>
- EWCS. (2015). *European Working Conditions Surveys (EWCS): 6th European Working Conditions Survey 1 Germany – German translation*. Dublin: Eurofound.
- Feather, N. T., & Rauter, K. A. (2004). Organizational citizenship behaviours in relation to job status, job insecurity, organizational commitment and identification, job satisfaction and work values. *Journal of Occupational and Organizational Psychology*, 77(1), 81–94. <https://doi.org/10.1348/096317904322915928>
- Felfe, J., Six, B., Schmook, R., & Knorz, C. (2014). *Commitment Organisation, Beruf und Beschäftigungsform (COBB) Zusammenstellung sozialwissenschaftlicher Items und Skalen (ZIS)*. <https://doi.org/10.6102/ZIS9>
- Finegan, J. E. (2000). The impact of person and organizational values on organizational commitment. *Journal of Occupational and Organizational Psychology*, 73(2), 149–169. <https://doi.org/10.1348/096317900166958>
- Fischer, R., & Mansell, A. (2009). Commitment across cultures: A meta-analytical approach. *Journal of International Business Studies*, 40, 1339–1358. <https://doi.org/10.1057/jibs.2009.14>
- Fischer, R., & Smith, P. B. (2006). Who cares about justice? The moderating effect of values on the link between organisational justice and work behaviour. *Applied Psychology*, 55(4), 541–562. <https://doi.org/10.1111/j.1464-0597.2006.00243.x>

- Furnham, A. (1984). Work values and beliefs in Britain. *Journal of Organizational Behavior*, 5(4), 281–291. <https://doi.org/10.1002/job.4030050405>
- Franke, F., & Felfe, J. (2008). Commitment und Identifikation in Organisationen. *Zeitschrift für Arbeits- und Organisationspsychologie A&O*, 52(3), 135–146. <https://doi.org/10.1026/0932-4089.52.3.135>
- Frieze, I. H., Olson, J. E., Murrell, A. J., & Selvan, M. S. (2006). Work values and their effect on work behavior and work outcomes in female and male managers. *Sex Roles*, 54(1/2), 83–93. <https://doi.org/10.1007/s11199-006-8871-z>
- Froese, F. J., & Xiao, S. (2012). Work values, job satisfaction and organizational commitment in China. *The International Journal of Human Resource Management*, 23(10), 2144–2162. <https://doi.org/10.1080/09585192.2011.610342>
- Gahan, P., & Abeysekera, L. (2009). What shapes an individual's work values? An integrated model of the relationship between work values, national culture and self-construal. *The International Journal of Human Resource Management*, 20(1), 126–147. <https://doi.org/10.1080/09585190802528524>
- George, J. M., & Jones, G. R. (1997). Experiencing work: Values, attitudes, and moods. *Human Relations*, 50(4), 393–416. <https://doi.org/10.1177/001872679705000404>
- Giauque, D., & Varone, F. (2019). Work opportunities and organizational commitment in international organizations. *Public Administration Review*, 79(3), 343–354. <https://doi.org/10.1111/puar.12951>
- Gollan, T., & Witte, E. H. (2014). From the interindividual to the intraindividual level. *Journal of Cross-Cultural Psychology*, 45(3), 452–467. <https://doi.org/10.1177/0022022113509885>
- Guhleemann, K. (2014). *Jung, ausgebildet — weg. Wechselpläne und Fachkräftemangel in Zeiten des demografischen Wandels im Gastgewerbe*. *Zeitschrift für Arbeitswissenschaft*, 68(1), 45–53. <https://doi.org/10.1007/BF03374421>
- Gutierrez, A. P., Candela, L. L., & Carver, L. (2012). The structural relationships between organizational commitment, global job satisfaction, developmental experiences, work values, organizational support, and person-organization fit among nursing faculty. *Journal of Advanced Nursing*, 68(7), 1601–1614. <https://doi.org/10.1111/j.1365-2648.2012.05990.x>
- Hansen, J.-I. C., & Leuty, M. E. (2012). Work values across generations. *Journal of Career Assessment*, 20(1), 34–52. <https://doi.org/10.1177/1069072711417163>
- Haque, A., Fernando, M., & Caputi, P. (2019). The relationship between responsible leadership and organisational commitment and the mediating effect of employee turnover intentions: An empirical study with Australian employees. *Journal of Business Ethics*, 156, 759–774. <https://doi.org/10.1007/s10551-017-3575-6>
- Hauß, S., & Kirchner, S. (2015). Identifying work value patterns: Cross-national comparison and historical dynamics. *International Journal of Manpower*, 36(2), 151–168. <https://doi.org/10.1108/IJM-05-2013-0101>
- Hayes, A. F., & Cai, L. (2007). Using heteroskedasticity-consistent standard error estimators in OLS regression: An introduction and software implementation. *Behavior Research Methods*, 39(4), 709–722. <https://doi.org/10.3758/BF03192961>
- Hirschi, A. (2010). Positive adolescent career development: The role of intrinsic and extrinsic work values. *Career Development Quarterly*, 58(3), 276–287. <https://doi.org/10.1002/j.2161-0045.2010.tb00193.x>

- Hitlin, S. (2007). Doing good, feeling good: Values and the self's moral center. *The Journal of Positive Psychology*, 2(4), 249–259. <https://doi.org/10.1080/17439760701552352>
- Howell, A., Kirk-Brown, A., & Cooper, B. K. (2012). Does congruence between espoused and enacted organizational values predict affective commitment in Australian organizations? *The International Journal of Human Resource Management*, 23(4), 731–747. <https://doi.org/10.1080/09585192.2011.561251>
- Inglehart, R. (1971). The silent revolution in Europe: Intergenerational change in post-industrial societies. *American Political Science Review*, 65(4), 991–1017. <https://doi.org/10.2307/1953494>
- ISSP Research Group. (2017). International Social Survey Programme: Work Orientations IV – ISSP 2015. <https://doi.org/10.4232/1.12848>
- Jin, J., & Rounds, J. (2012). Stability and change in work values: A meta-analysis of longitudinal studies. *Journal of Vocational Behavior*, 80(2), 326–339. <https://doi.org/10.1016/j.jvb.2011.10.007>
- Johnson, M. K., Sage, R. A., & Mortimer, J. T. (2012). Work values, early career difficulties, and the U.S. economic recession. *Social Psychology Quarterly*, 75(3), 242–267. <https://doi.org/10.1177/0190272512451754>
- Judge, T. A., & Bretz, R. D. (1992). Effects of work values on job choice decisions. *Journal of Applied Psychology*, 77(3), 261–271. <https://doi.org/10.1037/0021-9010.77.3.261>
- Kasser, T. (2002). *Sketches for a self-determination theory of values*. In E. Deci & R. Ryan (Eds.), *Handbook of self-determination research*. Rochester: University of Rochester Press.
- Kidron, A. (1978). Work values and organizational commitment. *Academy of Management Journal*, 21(2), 239–247. <https://doi.org/10.2307/255757>
- Kirkman, B. L., & Shapiro, D. L. (2001). The impact of cultural values on job satisfaction and organizational commitment in self-managing work teams: The mediating role of employee resistance. *Academy of Management Journal*, 44(3), 557–569. <https://doi.org/10.5465/3069370>
- Knoop, R. (1994). Work values and job satisfaction. *Journal of Psychology*, 128(6), 683–690. <https://doi.org/10.1080/00223980.1994.9921297>
- Kraatz, M. S., Flores, R., & Chandler, D. (2020). The value of values for institutional analysis. *Academy of Management Annals*, 14(2), 474–512. <https://doi.org/10.5465/annals.2018.0074>
- Kyvik, O., Zhang, Y., & Romero-Martinez, A. M. (2012). Value dimensions and creativity. An international comparative study. *International Journal of Manpower*, 33(4), 349–366. <https://doi.org/10.1108/01437721211243732>
- Lam, S. S. K., Schaubroeck, J., & Aryee, S. (2002). Relationship between organizational justice and employee work outcomes: A cross-national study. *Journal of Organizational Behavior*, 23(1), 1–18. <https://doi.org/10.1002/job.131>
- Lawrence, A., & Lawrence, P. (2009). Values congruence and organizational commitment: P-O fit in higher education institutions. *Journal of Academic Ethics*, 7, 297–314. <https://doi.org/10.1007/s10805-010-9103-2>
- Lyons, S. T., Higgins, C. A., & Duxbury, L. (2010). Work values: Development of a new three-dimensional structure based on confirmatory smallest space analysis. *Journal of Organizational Behavior*, 31(7), 969–1002. <https://doi.org/10.1002/job.658>
- Macky, K., Gardner, D., & Forsyth, S. (2008). Generational differences at work: Introduction and overview. *Journal of Managerial Psychology*, 23(8), 857–861. <https://doi.org/10.1108/02683940810904358>

- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
- McCarthy, D., Alexander, P. & Jung, Y. (2021). Enhancing the organisational commitment of public sector accounting staff through the pursuit of CSR objectives. *Journal of Accounting & Organizational Change*, 18(2), 304–324. <https://doi.org/10.1108/JAOC-09-2020-0139>
- McMullin, J. A., Cooke, M., & Downie, R. (2004). *Labour Force Ageing and Skill Shortages in Canada and Ontario* (Research Report W24). Ontario. University of Western Ontario.
- Meglino, B. M., & Ravlin, E. C. (1998). Individual values in organizations: Concepts, controversies, and research. *Journal of Management*, 24(3), 351–389. [https://doi.org/10.1016/S0149-2063\(99\)80065-8](https://doi.org/10.1016/S0149-2063(99)80065-8)
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61–89. [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates and consequences. *Journal of Vocational Behavior*, 61, 20–52. <https://doi.org/10.1006/jvbe.1996.0043>
- Miedaner, F., Kuntz, L., Enke, C., Roth, B., & Nitzsche, A. (2018). Exploring the differential impact of individual and organizational factors on organizational commitment of physicians and nurses. *BMC Health Services Research*, 18(180). <https://doi.org/10.1186/s12913-018-2977-1>
- Mitchell, T. R. (1997). *Matching motivational strategies with organizational contexts*. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior*. Greenwich CT: JAI Press.
- Moll, T. (2021). *Exploring a New Work Approach through Spirituality at Work in agile Organizations*. University of Hamburg, under Review.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2), 224–247. [https://doi.org/10.1016/0001-8791\(79\)90072-1](https://doi.org/10.1016/0001-8791(79)90072-1)
- Oliver, N. (1990). Work rewards, work values, and organizational commitment in an employee-owned firm: Evidence from the U.K. *Human Relations*, 42(6), 513–526. <https://doi.org/10.1177/001872679004300602>
- Parks, L., & Guay, R. P. (2009). Personality, values, and motivation. *Personality and Individual Differences*, 47(7), 675–684. <https://doi.org/10.1016/j.paid.2009.06.002>
- Pfaffinger, K. F., Reif, J. A. M., & Spieß, E. (2020). When and why telepressure and technostress creators impair employee well-being. *International Journal of Occupational Safety and Ergonomics*, 28(2), 958–973. <https://doi.org/10.1080/10803548.2020.1846376>
- Putti, J. M., Aryee, S., & Liang, T. K. (1989). Work values and organizational commitment: A study in the Asian context. *Human Relations*, 42(3), 275–288. <https://doi.org/10.1177/001872678904200305>
- Ravlin, E. C., & Meglino, B. M. (1987). Effect of values on perception and decision making: A study of alternative work values measures. *Journal of Applied Psychology*, 72(4), 666–673. <https://doi.org/10.1037/0021-9010.72.4.666>
- Rokeach, M. (1973). *The nature of human values*. Free Press; Collier-Macmillan.

- Ros, M., Schwartz, S. H., & Surkiss, S. (1999). Basic individual values, work values, and the meaning of work. *Applied Psychology*, 48(1), 49–71. <https://doi.org/10.1080/026999499377664>
- Sagie, A., Elizur, D. O., & Yamauchi, H. (1996). The structure and strength of achievement motivation: A cross-cultural comparison. *Journal of Organizational Behavior*, 17(5), 431–444. [https://doi.org/10.1002/\(SICI\)1099-1379\(199609\)17:5<431::AID-JOB771>3.0.CO;2-X](https://doi.org/10.1002/(SICI)1099-1379(199609)17:5<431::AID-JOB771>3.0.CO;2-X)
- Salzmann, T., Skirbekk, V., & Weiberg-Salzmann, M. (2010). *Wirtschaftspolitische Herausforderungen des demografischen Wandels. Demografischer Wandel – Hintergründe und Herausforderungen*. VS Verl. für Sozialwiss. <http://gbv.eblib.com/patron/FullRecord.aspx?p=751101> <https://doi.org/10.1007/978-3-531-92489-2>
- Schullery, N. M. (2013). Workplace engagement and generational differences in values. *Business Communication Quarterly*, 76(2), 252–265. <https://doi.org/10.1177/1080569913476543>
- Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture*, 2(1). <https://doi.org/10.9707/2307-0919.1116>
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., Ramos, A., Verkasalo, M., Lönnqvist, J.-E., Demirutku, K., Dirilen-Gumus, O., & Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, 103(4), 663–688. <https://doi.org/10.1037/a0029393>
- Seibt, T., & Hager, M. (2019). Behavioral patterns and organizational commitment. *Advances in Economics, Business and Management Research*, 78. <https://doi.org/10.2991/emt-19.2019.21>
- Sendoglu, A. A., Kocabacak, A., & Güven, S. (2013). The relationship between human resource management practices and organizational commitment: A field study. *Procedia – Social and Behavioral Sciences*, 99, 818–827. <https://doi.org/10.1016/j.sbspro.2013.10.553>
- Spagnoli, P., & Caetano, A. (2012). Personality and organisational commitment: The mediating role of job satisfaction during socialization. *Career Development International*, 17(3), 255–275. <https://doi.org/10.1108/13620431211241081>
- Twenge, J. M., Campbell, S. M., Hoffman, B. J., & Lance, C. E. (2010). Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. *Journal of Management*, 36(5), 1117–1142. <https://doi.org/10.1177/0149206309352246>
- UNESCO Institute for Statistics. (2012). *International standard classification of education: ISCED 2011*. UNESCO Institute for Statistics.
- Vecernik, J. (2003). Skating on thin ice: A comparison of work values and job satisfaction in CEE and EU countries. *International Journal of Comparative Sociology*, 44(5), 444–471. <https://doi.org/10.1177/002071520304400502>
- Verplanken, B., & Holland, R. W. (2002). Motivated decision making: Effects of activation and self-centrality of values on choices and behavior. *Journal of Personality and Social Psychology*, 82(3), 434–447. <https://doi.org/10.1037/0022-3514.82.3.434>
- Watson, J. M., & Meiksins, P. F. (1991). What do engineers want? Work values, job rewards, and job satisfaction. *Science, Technology, & Human Values*, 16(2), 140–172. <https://doi.org/10.1177/016224399101600202>
- Weng, D., McElroy, J. C., Morrow, P. & Liu, R. (2010). The relationship between career growth and organizational commitment. *Journal of Vocational Behavior*, 77(3), 391–400. <https://doi.org/10.1016/j.jvb.2010.05.003>
- Werkmeister, W. H. (1967). *Man and his values*. Lincoln: University of Nebraska Press.

- Yablo, P. D., & Field, N. P. (2007). The role of culture in altruism: Thailand and the United States. *Psychologia*, 50(3), 236–251. <https://doi.org/10.2117/psysoc.2007.236>
- Zhu, Y., Wei, R., Lo, V.-H., Zhang, M., & Li, Z. (2021). Collectivism and altruistic behavior: A third-person effect study of covid-19 news among Wuhan residents. *Global Media and China*, 6(4), 476–491. <https://doi.org/10.1177/20594364211045568>