



Understanding Personal Energy Awareness: Validation of the Energy Household Clarity Scale

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Abstract

People are facing a human energy crisis at work, where long hours prevent employees from replenishing their energy resources, leading to low job satisfaction and exhaustion. To alleviate these negative outcomes and improve their vitality, people often use energy management strategies. However, not all strategies are effective, and to use them successfully, individuals might need a good understanding of their energetic flow. This idea can be reflected in Energy Household Clarity (CE), described as understanding one's energy flow and how to influence it. In the present study, a scale measuring CE is validated using CFA. The study was conducted using a preexisting sample ($N = 2374$) of German employees who are simultaneously studying. Our results supported our hypothesis, albeit some only partially due to weaker-than-expected correlations. For convergent validity, correlations with mindful awareness and health awareness were tested. In partial support of convergent validity, CE correlated moderately positively with both mindful awareness and health awareness. For discriminant validity, correlations with self-concept clarity and time pressure were tested. Discriminant validity was fully supported with CE showing a weak negative correlation with self-concept clarity (reverse scored) and no relationship with time pressure. For criterion-related validity, correlations with vitality, work fatigue, and needs-based job crafting were investigated. In partial support of criterion-related validity, CE showed a moderate positive relationship with vitality, a weak negative relationship with work fatigue, and a weak positive relationship with needs-based job crafting. The paper ends by discussing theoretical and practical implications, strengths and limitations, and future directions.

Keywords: energy household clarity, human energy management, employee well-being, scale validation

Understanding Personal Energy Awareness: Validation of the Energy Household Clarity Scale

Why do some people experience burnout or fatigue at work while others seem to thrive? In today's fast-paced world, high work demands and stress are common. Employees are facing a “human energy crisis”, where having a high workload and long hours hinders employees' capacity for renewing energy (Kim et al., 2022). Such a work style can cause lower job satisfaction and higher emotional exhaustion (Parker et. al., 2017). To alleviate the human energy crisis, it might be helpful to know how to use one's energy strategically. According to the Conservation of Resources theory (COR), personal energy can be seen as a resource (Hobfoll, 1989) that aids in behavioral and emotional regulation following organizational norms (Fritz et al., 2011). However, this resource is limited, and high work demands, which necessitate continuous expenditure of effort (Baker & Demerouti, 2024), can deplete it (Hobfoll, 1989). Thus, it is crucial to replenish the personal energy supply regularly. This could be achieved by engaging in energy management strategies, activities that employees deliberately undertake to maintain high energy levels throughout the day, for example, taking a break, switching work tasks, or helping a colleague (Parker et al., 2017).

While many studies investigate energy management and its benefits, such as lower fatigue and higher vitality (Zacher et al., 2014), research also indicates that its effectiveness depends on the type of strategy and existing demands (Parker et al., 2017). Moreover, research suggests a discrepancy between the most commonly used strategies and the most effective ones in terms of engagement and performance (de Bloom et al., 2015). This means that choosing the “right” strategy is not straightforward. On one hand, strategy effectiveness depends on personal energy patterns (Lambusch et al., 2021). For example, employees can adjust the timing of activities to their chronotype (Völker & Wiegmann, 2025). On the other hand, it also depends on contextual factors such as job demands (Parker et al., 2017). For

example, the cognitive difficulty of a task has been found to affect how long a break has to be to be effective (Albulescu et al., 2022).

To make sense of this complexity, individuals may need a certain level of knowledge about their energy consumption and the activities that contribute to it, as well as the conservation and restoration of energy. This can be reflected in the Energy Household Clarity (CE). It can be defined as understanding one's energy, its structure, and the factors that influence it (Weigelt et al., 2024). People high in CE should be able to recognize which strategies truly replenish energy. Despite the potential contribution of CE, few studies are addressing it. A potentially useful CE scale with promising preliminary results has been developed (Weigelt et al., 2024). However, the sample size and number of correlates are low in this pre-existing analysis. Thus, the validity of the CE scale requires further examination. The present study aims to assess the convergent, discriminant, and criterion-related validity of the CE scale. Convergent validity refers to the extent to which theoretically similar variables correlate with each other. Discriminant validity shows how well unrelated concepts can be distinguished. Criterion-related validity is the extent to which a variable predicts or correlates with an outcome.

Validation of this scale will aid in positioning CE in the nomological net, and it will add insights into the individual psychological factors leading to effective energy management. Furthermore, it could provide researchers with a useful tool to investigate self-related knowledge about energy management. Research shows the benefits of energy management interventions (Das et al., 2019; Spreitzer & Grant, 2012). The CE scale could be used in such health-promotion interventions for monitoring the learning process and self-insight of participants (Spreitzer & Grant, 2012). Therefore, an investigation into this concept might have implications for educational purposes, as it should capture knowledge about energy management to identify deficits in this knowledge. Finally, it might be a helpful tool in

identifying people who are low in energy clarity and could therefore benefit from being educated on the topic the most.

Theory & Hypotheses Development

Human Energy & Energy Management

To be able to properly understand energy household clarity, it is important to first understand the concept of human energy. Quinn et al. (2012) distinguish between physical energy and energetic activation. While physical energy reflects physiological capacities to perform work, energetic activation reflects the subjective experience of energy experienced as vitality, vigor, enthusiasm, and zest. Since the scope of psychological research is focused more on subjective experiences rather than physiological capacities, the present study will focus on energetic activation.

There are many theories describing energy. Some consider it to be unlimited (e.g., self-determination theory), while others consider it a limited resource (e.g., conservation of resources theory; Quinn et al., 2012). According to COR by Hobfoll (1989), a resource is anything helpful in achieving goals, coping with demands, and maintaining well-being, and people are driven to acquire, protect, and maintain such resources. In the work context, Job Demands-Resources theory (JD-R) distinguishes between job demands (job aspects that cost effort) and job resources (motivational job aspects; Bakker & Demerouti, 2024). Within these theoretical models, energy can be considered a limited resource that can be depleted throughout the day. Considering the importance of energy for both performance (Fritz et al., 2011) and well-being (Zhang et al., 2018), it is crucial that employees systematically recharge and maintain their energy levels. Individuals replenish their energetic resources after work, which is referred to as after-work recovery (de Bloom et al., 2015). However, due to long hours or workers feeling obligated to answer messages after hours, recovery is often not sufficient to fully restore one's energetic supply (Fritz et al., 2011). Thus, energy management

might be the key to sustaining high energy levels, especially if job demands are high (Parker et al., 2017). These strategies can be employed both during (switching tasks) and after work (relaxation in the evening; de Bloom et al., 2015).

Energy management strategies are activities that employees deliberately engage in to keep energy levels high throughout the day (Parker et al., 2017). Researchers often divide these strategies into microbreaks (do not involve work-specific tasks, e.g., coffee break) and work-related strategies (work-specific tasks, e.g., making a to-do list), and further categorize them as physical (breaks to fulfill physical needs, e.g., drinking water), mental (focused, future-oriented tasks, e.g., making plans for the evening), relational (social interactions, e.g., asking a colleague for help), or spiritual strategies (seeing the bigger picture, e.g., thinking about meaning of one's work; Fritz et al., 2011). The variety of these strategies suggests that identifying ones that align best with individual needs might be key to successful energy management. With more clarity about their personal energy household, employees might be more capable of recognizing such strategies.

Energy Management and Clarity

To be able to use different energy management strategies effectively, there might be a minimal level of knowledge about one's personal energy household required. For instance, individuals have different chronotypes, which refer to a person's biological clock setting that defines their sleep patterns and energy rhythms during the day (Völker & Wiegmann, 2025). People with early chronotypes experience activity peak in the morning, while people with late chronotypes experience peak activity later in the day (Kühnel et al., 2022). It would be reasonable for employees to manage their activities based on their chronotype. For example, people with a late chronotype might benefit from starting work later, as they should have higher energy levels at this time. Indeed, Kühnel et al. (2022) found that employees with late

chronotypes were more creative in the afternoon, while people with early chronotypes were more creative in the morning.

Such understanding of strategic energy use is reflected in the concept of energy household clarity (CE). That is the extent to which a person is aware of how their daily energy flow is structured, which factors can influence it, and what influence they can exert on their energy flow (Weigelt et al., 2024). CE is a new concept with limited empirical evidence. However, research on related concepts suggests a potential connection with energy management effectiveness. For example, Schipper and Hogenes (2011) suggest that reflecting on energy use might help people realize how much control they have, and this should lead to more efficient energy use. Furthermore, there is evidence that educating people about energy management strategies is beneficial (Lambusch et al., 2021; Das et al., 2019). In their study, Spreitzer and Grant (2012) introduced an intervention designed to help students understand what depletes, sustains, and creates their energy. Students were asked to identify sources of energy increase or depletion in their daily lives. Afterwards, they were presented with a number of energy management activities (e.g., regular sleep schedule, exercise), and encouraged to commit to one or two such activities. Subsequently, students reported developing better sleep habits, regimen improvements, and new exercise regimes, suggesting potential positive effects of purposeful energy use for well-being. Altogether, the study suggests that knowledge about one's personal energy household is a powerful way to promote higher energy.

According to literature, reflecting on and learning about one's energy household seems to have positive effects (Spreitzer & Grant, 2012; Schipper & Hogenes, 2011). CE has a clear conceptual overlap with learning and reflecting on energy, indicating a strong potential for this concept to enhance energy management effectiveness. Moreover, while existing research has investigated management strategies extensively, less attention has been given to the

individual psychological factors that enable people to manage energy effectively. CE fits within this category, and its investigation could uncover valuable insights into why some employees manage their energy better than others; however, CE has yet to be researched. Weigelt et al. (2024) have developed a scale for CE with items such as: “I had a calm awareness of my feelings.” or “I did something creative to relax,”. The preliminary results were promising. The scale showed high reliability with Cronbach's alpha ranging from .91 to .96 (measured at multiple time points). Moreover, it had significant correlations with vitality ($r = .11$ at the between-person level, $r = .48$ at the within-person level), supporting the idea that people higher in CE tend to feel more vital overall, but especially on days when they experience high CE. The scale also showed significant correlation with fatigue at the between-person level ($r = -.37$) but not at the within-person level, suggesting that people with higher CE generally tend to feel less fatigued, but not on a day-to-day level. Overall, evidence examining the validity is encouraging but limited due to a small sample size. The present study will continue in these efforts by assessing its convergent, discriminant, and criterion-related validity within a larger sample.

Convergent Validity

First, the convergent validity of the CE scale will be assessed. If the scale is truly measuring CE, it should be correlated to conceptually similar variables. For this purpose, mindful self-care will be used. It is a process of mindful awareness and the ability to assess one's internal needs and external demands, and a subsequent engagement in self-care practices that aid well-being and effectiveness, to address these needs and demands (Cook-Cottone & Guyker, 2018). Mindful self-care is a suitable variable for convergent validity testing because it has a large theoretical overlap with CE. Both highlight self-awareness, understanding one's own needs, and actively engaging in well-being practices. The literature indirectly supports this theoretical overlap. For example, Ju et al. (2024) describe mindful self-care as a way of self-

regulation that can maintain and increase well-being, aligning with CE's emphasis on purposeful energy use to achieve positive well-being outcomes. Furthermore, in their study, Slota et al. (2024) found that participants in a mindfulness and self-care intervention reported lower stress and that mindfulness practices were connected to how they dealt with this stress, which is consistent with how CE is expected to help people regulate their energy more effectively, potentially mitigating stress as a result.

However, not all aspects of mindfulness self-care align with CE. According to Cook-Cottone and Guyker (2018), there are 6 facets. Namely, mindful relaxation (activities that help people relax, such as doing something creative), physical care (actions consistent with proper hydration, nutrition, and exercise), self-compassion and purpose (feeling a sense of meaning when getting through difficulties), supportive relationships (presence of supportive people in one's life), supportive structure (healthy living and working environment), and mindful awareness (being aware of one's thoughts, feelings and body, while simultaneously being able to intentionally choose which feelings and thoughts will one use to guide their actions). Mindful awareness has the strongest conceptual overlap with CE, since both are rooted in awareness of both internal states and their influence over them. The remaining facets refer to specific actions or resources that support well-being, rather than internal understanding. Since mindfulness involves awareness of both internal and external states by definition (Guidetti et al., 2019), I would still expect a moderate association between these action-oriented facets and CE. However, I suspect the conceptual overlap to be stronger for mindful awareness. I state the following hypotheses:

H1: Energy household clarity will show a) a moderate to strong positive association with mindful awareness and b) a moderate positive association with mindful relaxation, physical care, self-compassion and purpose, supportive relationships, and supportive structure.

Another variable that is potentially suitable for convergent validity testing of the CE scale is health awareness. This concept is a subscale from health health-oriented leadership scale, and it refers to being attentive and reflective of one's health, job-related strain, and what affects these states (Franke et al., 2014). There is a clear theoretical overlap between health awareness and CE. Both are concepts that emphasize attunement to one's inner states and needs. Moreover, according to Bornemann et al. (2015), being aware of one's internal body signals and higher-order processes that serve to interpret these, which is consistent with health awareness, is important for self-regulation. This aligns with CE potentially being an important factor in being able to proactively manage one's behavior to achieve ideal energy flow and well-being outcomes. Thus, I hypothesize the following:

H2: Energy household clarity will show a strong association with health awareness.

Discriminant Validity

Second, the discriminant validity will be investigated. If the CE scale is valid, it should be unrelated to theoretically distinct concepts. To assess discriminant validity, self-concept clarity will be used. According to Xiang et al. (2023), self-concept clarity refers to the extent to which individuals feel they have a clear, coherent, confident, and stable sense of identity. People with high self-concept clarity are confident in their sense of self across time, whereas people low in self-concept clarity feel more unsure about their identity with fluctuating self-perception (Campbell et al., 1996). There is some theoretical overlap between self-concept clarity and CE. According to Weigelt et al (2024), the CE scale is oriented toward this concept. Furthermore, both variables involve self-awareness and self-reflection. However, there are some key differences as well. CE is more dynamic (Weigelt et al., 2024)

and context-specific since it focuses on one's personal energy household. In contrast, Self-concept clarity is relatively stable (Weigelt et al., 2024) and a broader concept, as it relates to the overarching sense of self. CE and self-concept clarity are similar in that they refer to clarity about oneself. However, they are dissimilar in that CE is more specific with its focus on energy. Thus, I hypothesize that:

H3: There is a low to moderate positive association between energy household clarity and self-concept clarity.

To further demonstrate the unique contribution of CE, it is important to distinguish it from conceptually unrelated constructs. For this purpose, time pressure will be added as a second variable for testing discriminant validity. Considering the novelty of CE, few studies address the connection between these two variables. However, there are clear theoretical differences that suggest CE and time pressure are highly distinct. Time pressure is an external job characteristic and an environmental factor, whereas CE is considered to be an internal reflective process. Furthermore, according to Peter et al. (2025), time pressure acts as an environmental demand, causing depletion of resources, increased strain, and lower well-being. In contrast, CE is expected to enhance energy resources by fostering strategic energy use and potentially increasing well-being in the process. This demonstrates the contrasting nature of CE and time pressure and underscores their conceptual distinctiveness. I hypothesize that:

H4: There is no association between energy household clarity and time pressure.

Criterion-related Validity

Finally, criterion validity will be tested. If the CE scale is valid, it should correlate with the variables it is expected to predict. For this purpose, vitality and fatigue will be used. Vitality refers to the experience of energy and aliveness (Ryan & Frederick, 1997), and fatigue can be described as feeling weary, tired, or lacking energy (Ricci et al., 2007). Based on these definitions, vitality reflects energetic activation, whereas fatigue indicates the absence of energy. As such, these variables complement each other and provide a holistic view of well-being. They are suitable variables for criterion-related validity testing as CE is expected to foster a more purposeful and strategic energy management, which should, in turn, increase vitality, lower fatigue, and create more energetic activation as a result. As mentioned above, energy management is associated with higher vitality and lower fatigue (Blaise et al., 2024), solidifying the idea that by facilitating energy management, CE should be positively related to vitality and fatigue. I state the following hypotheses:

H5: Vitality shows a strong positive association with energy household clarity.

H6: Fatigue shows a strong negative association with energy household clarity.

Beyond energetic states such as vitality and fatigue, behavioral outcomes will be investigated to assess criterion-related validity further. Specifically, Needs-Based Job Crafting (NBJC) will be used. Tušl et al. (2024) define it as engaging in goal-oriented behaviors to proactively and intentionally make one's job align with their needs. This concept is rooted in the DRAMMA model of psychological needs, which stands for the following: Detachment (not thinking about work during free time), relaxation (low activation and high positive affect activities), autonomy (feeling in control over choices and actions), mastery (being stimulated enough to feel sense of achievement and competence), meaning (being able to do

personally purposeful and valuable things), affiliation (feeling connected with others). NBJC should satisfy these needs and promote positive work-related outcomes as a result (Tušl et al., 2024). NBJC has been found to increase energy in employees throughout the day, and as such, it can be seen as an energy management strategy (Kosenkranius et al., 2023). If CE is expected to aid individuals in choosing effective energy management strategies, then the same should be true for NBJC. With clarity about their energy household, individuals might be able to use NBJC more strategically. I hypothesize that:

H7: Needs-based job crafting has a strong positive association with energy household clarity.

Method Section

Design & Procedure

The present study used a cross-sectional self-report survey to investigate the validity of the energy household clarity scale (CE). The majority of the sample was recruited via SONA Systems, an online platform commonly used by universities for participant recruitment, often recruiting students. A smaller portion of participants was contacted via a mailing list used as a survey tool by the University of Hagen. The sample was collected using convenience sampling, with 70.9 % of participants (psychology students) receiving compensation in the form of university credits. Participants were asked to complete a battery of self-report surveys and to provide informed consent about the usage of their data twice, before and after completing the battery. Participants who didn't receive university credit as compensation were given a choice between a standard (35-45 minutes) and a shortened (25-35 minutes) version at the beginning of the study. For the psychology students who received credit, only the long version of the survey was made available. Through the survey battery, attention and seriousness checks were added to ensure the quality of the data. At the end of

the questionnaire, participants were given a chance to leave any comments. The materials were provided in German.

Participants

The total number of participants recruited for the study was 2374, and after applying the exclusion criteria, the sample size became 1283. After running confirmatory factor analysis, the sample size decreased further to 1272 due to missing items in relevant scales. First, participants were excluded if they did not provide informed consent to participation (526 participants). From this reduced sample, participants who did not pass attention (399 participants) and seriousness checks (8 participants) were excluded. Finally, participants with suspiciously quick answers were also excluded (158 participants). There was an inclusion criterion of being aged 18 years or above; however, no participants violated this criterion. The age range was 18 to 64 years ($M = 33.12$, $SD = 10.29$), with 78.3 % identifying as women, 20.6 % identifying as men, and 1.1 % identifying as non-binary. All of the participants were university students who were simultaneously employed, with 70.9 % majoring in psychology. The most common employment industry among participants was healthcare and social services, with 28.6 %, followed by administration and public service, with 11.9 % and other with 11 %. “Other” comprised a wide range of industries, with education, chemistry, and sports being the most common. 24.4 % of participants were employed in a leadership position.

Measures

Attention & Seriousness Checks

Attention checks were used three times throughout the questionnaire. An example item is: “At the request of the management, I check 'never' for this statement.”, with answer options ranging from 1 (never) to 5 (always). A seriousness check was used at the end of the questionnaire. The specific item was: “In what form did you participate in the study?”, with two answer options: “I participated seriously and answered all questions correctly.”, or “ I did

not participate seriously and (partly) clicked through inattentively and/or did not answer truthfully.”

Energy Household Clarity

The Energy Household Clarity (CE) scale was newly developed by Weigelt et al. (2024). It is a 7-item instrument with items such as: “I have a clear idea of which influences are particularly significant for my energy levels throughout the day.” or “I know when measures are needed to counteract my energy loss throughout the day.” A full set of items together with the corresponding standardized factor loadings can be found in Table 1. Participants are asked to indicate to what extent statements regarding energy management clarity apply to them. The answer options are presented as a 5-point Likert scale ranging from 1 (does not apply at all) to 5 (applies completely).

Table 1

Energy Household Clarity Flow Items With Corresponding Factor Loadings

CE Item	Factor Loading
I know what my energy levels depend on throughout the day.	.82
I am aware of the factors that influence my daily energy levels.	.86
I have a clear idea of which influences are particularly significant for my energy levels throughout the day.	.86
I have a clear picture of my daily energy levels.	.76
I am aware of how I can influence my energy levels throughout the day.	.85
I have a clear idea of how I can influence my daily energy levels.	.83
I know when measures are needed to counteract my energy loss throughout the day.	.75

Note. All factor loadings are standardized and statistically significant ($p < .001$).

Mindful Self-Care

To measure Mindful Self-Care, we used a scale developed by Cook-Cottone & Guyker (2018). The scale consists of 36 items divided into 7 subscales. Namely, mindful relaxation, which included items such as “I did something intellectual (using my mind) to help me relax (e.g., read a book, write)”. Physical care with items like “I exercised at least 30 to 60 minutes”. Self-compassion and purpose, which included items like “I kindly acknowledged my challenges and difficulties”. Supportive relationships subscale with items such as “I felt supported by people in my life”. Supportive structure category with items like “I maintained a manageable schedule”. Mindful awareness with questions such as “I had a calm awareness of my thoughts”. And finally, general questions such as “I planned my self-care”. The participants were asked to indicate how often they engaged in specific mindful self-care behaviors in the past week and give an answer on a 5-point Likert scale from 1 [never (0 days)] to 5 [regularly (6 to 7 days)].

Health Awareness

To measure Health Awareness, a subscale from the Health-Oriented Leadership scale developed by Franke and Felfe (2011) was used. The subscale consists of 3 items, such as “I consciously pay attention to health warning signs”. The participants were asked to what extent they agreed with these statements. The answer options were given on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Self-Concept Clarity

Self-concept clarity was measured with a 12-item scale developed by Stucke (2002). The scale includes items like: “My attitudes about myself often conflict with each other.” or “It's often difficult for me to make decisions because I don't know exactly what I really want.” The participants were asked to rate statements about their personality on a 5-point Likert scale ranging from 1 (Not at all applicable) to 5 (very applicable).

Time Pressure

A scale developed by Semmer et al. (1999) was used to measure time pressure. The scale comprises 5 items related to time pressure in work. Example items are: “How often do you work faster than you normally would in order to get the work done?” or “How often is a fast pace required in your work?” The participants were asked to indicate to what extent they agreed with the questions. The answer options take the form of a 5-point Likert scale again, with 1 corresponding to very rarely/ never, and 5 corresponding to very often (once or several times a day).

Vitality

As a vitality assessment, I used a 6-item scale developed by Ryan and Fredrick (1997). The scale included items such as: “I feel alive and vital.” or “I feel alert and awake almost all the time.” Participants were instructed to read statements about their well-being and indicate to what extent these statements generally apply to them. Their answer options were presented in the form of a 5-point Likert scale ranging from 1 (not at all true) to 5 (completely true).

Work Fatigue

As a measure of fatigue, I used the German version of the Three-Dimensional Work Fatigue Inventory (3D-WFI), developed by Frone and Tidwell (2015). The inventory consists of 18 items divided into three dimensions, namely physical, mental, and emotional. Example items for each dimension were “How often did you feel physically exhausted at the end of a workday?”, “How often do you feel mentally exhausted at the end of a workday?” and “How often did you feel emotionally drained at the end of a workday?”, respectively. The participants were asked to indicate on a scale of 1 (never) to 5 (always) how often in the past three months they felt signs of exhaustion.

Need-Based Job Crafting

To assess needs-based job crafting, I used a scale developed by Tussl et al. (2024). The scale contains 18 questions distributed into 6 categories, namely detachment, relaxation,

autonomy, mastery, meaning, and affiliation. The detachment category included items like “I have organized my work so that I switch off from professional duties during my free time”. Relaxation had items such as “I have designed my work so that I rest during my free time”. Autonomy included items like “I have organized my work so that I determine my own actions”. Mastery included items like “I have designed my work so that I feel competent in the things I do”. The meaning category had items such as “I have ensured that I experience meaning in my work”. Finally, affiliation included items like “I ensured that I experience a close connection with the people around me at work”. The participants were provided with an explanation of job crafting, and then they were asked to indicate how often in the past month they had engaged in different job crafting behaviors. The answer options were provided in the format of a 5-point Likert scale, with 1 corresponding to never and 5 corresponding to very often.

Results Section

Preliminary Analysis

Preliminary Analysis of Mindful Self-Care Scale

As described in the method section, I originally intended to use the entire Mindful Self-Care scale. However, after preliminary analysis, only the mindful awareness subscale was retained. For multiple subscales, the reliabilities and factor loadings were below the acceptable threshold. Notably, other subscales showed acceptable psychometric properties, but their conceptual overlap with CE was lower compared to mindful awareness. Ultimately, the decision to use solely the mindful awareness subscale was driven by practical considerations during model testing, as including the entire scale led to convergence issues. Simplifying the model made it more coherent and allowed for precise hypothesis testing.

Descriptive Statistics

Descriptive statistics, including means, standard deviations, and reliability estimates (McDonald's Omega), were measured for all core variables and can be found in Table 2. All variables were measured using a 5-point Likert scale. Reliability estimates ranged from .747 for needs-based job crafting - Autonomy subscale to .956 for the work fatigue - emotion subscale. All scales showed acceptable or high internal consistency, with the two subscales showing the lowest ω (autonomy and mastery subscales from the needs-based job crafting scale) having only 3 items.

Table 2

Means, standard deviations, and reliabilities for the core variables.

Variable	Mean	SD	ω
Energy Household Clarity	3.56	0.76	.93
Mindful Awareness	3.38	0.81	.90
Health Awareness	3.55	0.79	.83
Self-concept Clarity	2.52	0.81	.91
Time Pressure	3.13	0.88	.86
Vitality	3.27	0.87	.95
Work Fatigue			
Physical	3.26	1.00	.95
Mental	3.40	0.96	.95
Emotional	2.96	1.10	.96
Needs-Based Job Crafting			
Detachment	3.63	0.97	.93
Relaxation	3.42	0.93	.83
Autonomy	3.48	0.83	.75
Mastery	3.58	0.76	.77
Meaning	3.51	0.96	.89

Variable	Mean	SD	ω
Affiliation	3.31	1.02	.94

Assumptions checks

Before running the main analysis, a number of assumptions were checked to make sure the data were suitable for structural equation modeling. Missing data was examined with Little's MCAR test. The rates were below the commonly accepted 20% across all variables, indicating there is no significant impact of missing data on the analysis. For normality assumptions, skewness and kurtosis were assessed for each item. Every value was within the accepted threshold of ± 1 and ± 2 for skewness and kurtosis, respectively, suggesting the normality assumption was met. Multicollinearity was assessed via examination of correlations. No correlation exceeded .90, indicating no assumption violation. To check whether the sample size was satisfactory, the ratio between sample size ($n = 1272$) and number of parameters (255) was calculated, with the result being around 5:1, meeting the required minimum.

Hypotheses Testing

The present study aimed to validate the Energy Household Clarity Scale. To do so, confirmatory factor analysis was performed using R by creating a single model with 15 latent factors. These include CE as a focal variable modelled with mindful awareness and health awareness to assess convergent validity, self-concept clarity, and time pressure to assess discriminant validity, vitality, and work fatigue (which was represented by 3 subscales - physical, mental, and emotional subscales), and needs-based job crafting (represented by detachment, relaxation, autonomy, mastery, meaning, and autonomy subdimensions) to assess criterion-related validity. The latent correlations between CE and the core variables were examined to evaluate the hypotheses of this study. Results of the hypotheses can be found in

Table 3, and correlations between all variables can be found in Table 4 (Appendix A). Based on the guidelines proposed by Schumacker and Lomax (2010), which suggest that CFI and TLI larger than .90 and RMSEA and SRMR lower than .05 indicate good fit, it can be assumed that the model fit of the present study is acceptable (CFI = .93, TLI = .92, RMSEA = .04, SRMR = .04). Chi-Square was significant ($\chi^2 = 8470.58$, $p < .001$), which is indicative of poor fit. However, given Chi-Square's sensitivity to large sample sizes, it is likely overstating the model's misfit (Schumacker & Lomax, 2010).

Convergent Validity

To assess convergent validity, correlations between CE and both mindful awareness and health awareness were investigated. A moderate to strong positive association between CE and mindful awareness (hypothesis 1) and a strong positive association between CE and health awareness (hypothesis 2) were expected. Mindful awareness showed a significant moderate positive correlation with CE ($\psi = .398$, $p < .001$). Similarly, health awareness showed a significant moderate positive correlation with CE ($\psi = .356$, $p < 0.001$). Results align with the hypotheses, although health awareness had a weaker correlation than hypothesized.

Discriminant Validity

For discriminant validity, correlations between CE and both self-concept clarity and time pressure were assessed. A weak positive association was expected between CE and self-concept clarity (hypothesis 3), and no association was expected between CE and time pressure (hypothesis 4). For self-concept clarity, a weak negative association was found with CE ($\psi = -.263$, $p < .001$). All self-concept clarity scale items were reverse-scored; thus, a higher scale score reflects lower self-concept clarity. For time pressure, a negligible negative correlation was found with CE ($\psi = -.049$, $p < .001$). These results are in line with the hypotheses.

Criterion-Related Validity

To test for criterion-related validity, correlations between CE and vitality, work fatigue, and needs-based job crafting were assessed. A strong positive association was expected between CE and vitality (hypothesis 5), a strong negative association was expected between CE and work fatigue (hypothesis 6), and a strong positive association was expected between CE and needs-based job crafting (hypothesis 7). Vitality showed a moderate positive correlation with CE ($\psi = .371, p < .001$), while work fatigue showed significant but weak negative correlations [$\psi = (-.164 - (-.219)), p < 0.001$]. Needs-based job crafting showed significant but weak positive correlations [$\psi = (.151 - .240), p < .001$]. The results support the hypothesized correlation directions; however, all relationships were weaker than expected.

Table 3

Results Of Hypotheses Testing: Correlations Between CE And Latent Variables

Hypothesis	ψ
Convergent Validity	
H1: CE ~ Mindful Awareness	.40*
H2: CE ~ Health Awareness	.36*
Discriminant Validity	
H3: CE ~ Self-Concept Clarity	-.26*
H4: CE ~ Time Pressure	-.05
Criterion-related Vitality	
H5: CE ~ Vitality	.37*
H6: CE ~ Work Fatigue	
Physical	-.16*
Mental	-.22*
Emotional	-.18*
H7: CE ~ Needs-Based Job Crafting	
Detachment	.19*

Hypothesis	ψ
Relaxation	.24*
Autonomy	.19*
Mastery	.18*
Meaning	.16*
Affiliation	.15*

Note. * $p < .001$

Discussion

In the present study, the convergent, discriminant, and criterion-related validity of the energy household clarity scale was investigated. For convergent validity testing, I hypothesized that CE would have a moderate to strong positive association with mindful awareness and a moderate positive association with the rest of mindful self-care facets, which reflect specific mindful practices (hypotheses 1a and 1b). Hypothesis 1b was not addressed, as all subscales from mindful self-care other than mindful awareness were removed from the analysis due to reliability and convergence issues (for details, see the results section). Further, I predicted a strong positive association between CE and health awareness (hypothesis 2). I theorized that these variables would have a large conceptual overlap with CE, as all three constructs focus on awareness of internal states and how to influence them (Cook-Cottone & Guyker, 2018; Franke et al., 2014).

For the discriminant validity, I hypothesized CE to have a low to moderate positive relationship with self-concept clarity (hypothesis 3). This construct does have some conceptual overlap with CE, as both involve self-awareness and reflection (Campbell et al., 1996). However, there are clear distinctions as well, with CE being dynamic and narrow while self-concept clarity is stable and dynamic (Weigelt et al., 2024). Moreover, I predicted CE to

have no significant relationship with time pressure (hypothesis 4), as there are conceptual differences with time pressure being external job demand (Peter et al., 2025), in contrast to CE's internal, reflective nature (Weigelt et al., 2024).

Finally, for criterion-related validity, I hypothesized that CE would have a strong positive association with vitality (hypothesis 5) and a strong negative association with work fatigue (hypothesis 6). CE is expected to promote energetic states by helping people choose effective energy management strategies. Since vitality can be seen as the presence of energy (Ryan & Frederick, 1997), while fatigue can be seen as a lack thereof (Ricci et al., 2007), CE should lead to more vitality and less fatigue. Furthermore, I predicted a strong positive relationship between CE and needs-based job crafting (hypothesis 7). This construct can be considered an energy management strategy (Kosenkranius et al., 2023), and since CE should aid individuals in managing energy more effectively, it should also lead to more deliberate use of needs-based job crafting.

The hypotheses were tested via confirmatory factor analysis and by assessing latent correlations between CE and core variables. I found that CE had a moderate positive correlation with mindful awareness, health awareness, and vitality, and a low positive correlation with needs-based job crafting. Further, CE showed a low negative correlation with self-concept clarity (measured with a reverse-scored items reflecting lack of self-concept clarity) and work fatigue, and no correlation with time pressure.

Interpretation of Results

Overall, the results support the hypothesized directions, although for convergent and criterion-related validity, correlations were weaker than expected. For discriminant validity, hypotheses were met both in terms of direction and magnitude. In the initial phases of this thesis project, I anticipated stronger correlations between CE and the validation constructs. However, after more in-depth studying of the topic and working with the data, I concluded

that lower correlations are more reasonable and do not necessarily undermine the results. Even for variables that should be related, a very high correlation could imply redundancy. Conversely, moderate correlations imply that the investigated variables are unique constructs. Overall, the results support convergent, discriminant, and criterion-related validity of the CE scale.

For convergent validity (hypotheses 1 and 2), the correlations were slightly lower than expected. Mindful awareness, unlike CE, is not centered around energy. It focuses on internal awareness in general rather than energy awareness. Another possible explanation is that the scale asked participants about their behavior within the past week, making it more indicative of a temporary state, in contrast to the CE scale, which assesses general tendency. For health awareness, it might be that the relationship between awareness and self-regulation is more nuanced than it seems. For example, being overly attentive to one's bodily sensations can lead to health anxiety (Owens et al., 2004), a belief that bodily sensations are indicative of serious illness (Asmundson et al., 2010). This suggests that being aware of one's health isn't necessarily connected to greater clarity. Instead, individuals with high health awareness could have misinterpreted their bodily signals, which could lead to less effective strategies. Moreover, similarly to mindful awareness, health awareness is not necessarily focused on energy, and these conceptual differences may result in lower correlation.

For discriminant validity, both hypotheses (3 and 4) were fully supported with CE showing low negative correlation with self-concept clarity, which was a reverse score and indicated a lack of self-concept clarity. This suggests that CE is related to a general sense of self, showing some conceptual overlap between the two kinds of clarity, but it is low enough as not to suggest any redundancy. Furthermore, CE had no significant correlation with time pressure, indicating no conceptual overlap. These results indicate that CE is a distinct and independent construct.

For criterion-related validity hypotheses (5, 6, and 7), all correlations were lower than expected. However, vitality stood out with a substantially higher correlation compared to the rest of the criterion-related variables. This was unexpected, as vitality and fatigue are seemingly the opposite sides of the same coin, with one indicating presence and the other absence or energy, respectively. However, these concepts might be more distinct than expected. Indeed, according to Loy et al (2018), there is an ongoing debate on whether fatigue can be conceptualized as the opposite of energy or vitality. There is evidence suggesting that they are distinct constructs. Studies found a difference only in energy but not in fatigue or vice versa, for example, exercise had a greater effect on increasing vitality than on decreasing fatigue (Loy et al., 2018). Moreover, the present study found moderate correlations between all work fatigue facets and vitality, supporting the idea that they are related but distinct constructs. This could be explained by the conceptual discrepancy of vitality and work fatigue. Vitality is a general construct, while work fatigue is domain-specific, investigating fatigue in work settings only. Moreover, fatigue was measured by a scale with a specific time frame (the past three months). This conceptual narrowness makes work fatigue align less with CE, which is a stable and non-domain specific, just like vitality. Finally, needs-based job crafting (NBJC) had low correlations with CE. This could be the case because while energy awareness may foster intentions to engage in energy management behaviors such as NBJC, it might still not result in the intended behavior due to the intention-behavior gap (Jekauc et al., 2025). Furthermore, just like work fatigue, the needs-based job crafting scale had a specific temporal frame (1 month), which could be the reason for the low correlations for similar reasons.

Theoretical & Practical Implications

The present study has important implications. It contributes to the existing literature on energy management, and it introduces and validates a new concept, Energy Household

Clarity (CE). Moreover, CE offers new avenues for investigating individual psychological factors influencing effective energy management. Finally, the focus on CE outcomes such as vitality, fatigue, and needs-based job crafting offers interesting insights into occupational health research. Considering the substantial correlation with vitality and weak negative correlation with fatigue, the findings of this paper position CE as a potential energy resource. Importantly, these findings only somewhat align with previous research by Weigelt et al. (2024), who found moderately significant correlations of CE with vitality and fatigue on the within-person level. On the between-person level, which is more in line with the present study, they only found a significant weak correlation between CE and vitality, and no significant correlation for fatigue. While vitality shows a consistent association with CE (although the magnitude seems to change), investigation into the relationship between CE and fatigue shows inconsistent results.

The present study has practical implications as well. It highlights the importance of understanding one's energy flow to enhance well-being. The findings suggest that it might be beneficial to create interventions for employees to increase their energy clarity. This might be done in the form of training or workshops that utilize self-reflective practices. Indeed, studies investigating such interventions showed promising results, such as better sleep patterns and healthier daily habits for students (Spreitzer and Grant, 2012) and vitality, sleep quality, and overall quality of life for employees (Das et al., 2019). Moreover, the CE scale could be a useful tool in identifying individuals who are particularly low in energy clarity and could benefit the most from an intervention.

Strengths & Limitations

One of the main strengths of the present study is its large sample size ($N = 2374$), which makes the results more reliable and stable. Moreover, it allows for a more complex data analysis that would not be plausible with smaller samples. The rigorous statistical analysis is

another strength of this paper. Specifically, confirmatory factor analysis. As a part of this analysis, latent correlations were generated. The focus on correlation on a latent level is very beneficial as it controls for measurement error. This approach is more accurate and strengthens the statistical conclusions of the study. Additionally, reliable and established questionnaires were used to measure all core constructs used for CE validation, which supports the internal validity. Finally, the topic of the present research is a very practical and applicable one. Energy management is relevant in occupational health literature as energy regulation is necessary for well-being at work.

One limitation was a homogeneous sample, with participants sharing similar circumstances and experiences. As mentioned above, it consisted mostly of German working psychology students. Simultaneously working and studying might pose unique energy management challenges that are not present in the general population, potentially hindering the generalizability of the results. Another limitation could be that the various time frames of the scales used to measure some core variables could be another limitation. While these measures were used as recommended in the manuals (i.e., asking about the past week or the past month, indicating a temporary state), the CE scale assesses energy household clarity in general. This inconsistency can cause lower associations, as a general tendency might not match a person's experience or behavior during a very specific time point. A final constraint is that I worked with several German materials (key scales and supporting literature) without any German proficiency, meaning I relied heavily on translation tools. Thus, there is a risk that some subtle nuances and meanings could have been lost in translation.

Future Directions

Future research could focus on validating the energy household clarity scale further. The present study had a limited set of variables for investigation, as I was working with a preexisting dataset. With unlimited options, researchers can choose variables that better

reflect CE, especially for convergent validity testing, since the variables used in the present study likely had lower conceptual overlap with CE than expected. CE is a very specific and conceptually narrow concept, and it is unlikely that any existing construct reflects it fully. However, some variables could reflect it more closely. For instance, interoceptive awareness could be more suitable. It is defined as the extent to which one is aware of bodily signals and conditions (Gross et al., 2025). This awareness might be a prerequisite for understanding one's energy flow. Another potential variable is metacognitive awareness, which is defined as being aware of one's cognitive processes and regulating them (Alotaibi, 2024). CE could be considered a specific case of metacognitive awareness, as it involves monitoring and regulation of cognitive processes, specifically for managing energy. Moreover, given the relatively high correlation between CE and vitality compared to the rest of the criterion-related validity, it might be worthwhile to investigate this link further. For example, future studies could focus on the indirect connection between CE and vitality via self-care behaviors of needs-based job crafting.

Additionally, study designs beyond correlational or cross-sectional could be used. For example, researchers could conduct an experimental intervention study where they randomly assign employees to an energy management intervention group versus a control group. For the intervention, participants could be asked to track their energy fluctuations throughout the day, as well as factors influencing these fluctuations. Check-in meetings could be organized to discuss and reflect together on what influences participants' energy and think about what energy management strategies they can use to optimize their energy flow. Afterwards, CE, along with energy indicators like vitality, fatigue, vigor, engagement, or burnout, could be assessed. This design would allow researchers to see whether training leads to higher CE, answering the question of whether it can be learned. Furthermore, by assessing the effect of

CE variables that indicate the presence of energy (e.g., vitality, vigor), researchers could observe whether CE leads to higher energy levels.

Conclusion

Given the human energy crisis faced by many employees, the topic of human energy and how to foster it is incredibly relevant. This study investigates the energy household clarity scale, offering a potential tool to investigate psychological factors influencing how well people can manage their energy. While all hypotheses testing convergent, discriminant, and criterion-related validities were supported in terms of direction, correlations for convergent and criterion-related validity were weaker than expected. Overall, these results support the validity of the CE scale and underline its potential to be a useful tool both for researchers to use in energy management studies and for practitioners to be able to identify people with low CE who are most likely to benefit from training on increasing CE.

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Appendix A

Table 4

Latent correlations of core study variables

	CE	MA	HA	SCC	TP	VIT	FAT-P	FAT-M	FAT-E	NBJC-D	NBJC-R	NBJC-AU	NBJC-MA	NBJC-ME	NBJC-AF
CE	-														
MA	.40**	-													
HA	.36**	.48**	-												
SCC	-.26**	-.41**	-.28**	-											
TP	-.05	-.17**	-.22**	.10*	-										
VIT	.37**	.59**	.36**	-.44**	-.17**	-									
FAT-P	-.16**	-.30**	-.20**	.26**	.44**	-.49**	-								
FAT-M	-.22**	-.37**	-.24**	.32**	.43**	-.52**	0.70**	-							
FAT-E	-.18**	-.36**	-.22**	.35**	.40**	-.46**	0.61**	.79**	-						
NBJC-D	.19**	.34**	.31**	-.15**	-.18**	.26**	-.18**	-.16**	-.17**	-					
NBJC-R	.24**	.44**	.44**	-.17**	-.20**	.35**	-.23**	-.22**	-.19**	0.67**	-				
NBJC-AU	.19**	.37**	.32**	-.20**	-.13**	.35**	-.25**	-.26**	-.24**	.37**	.49**	-			
NBJC-MA	.18**	.30**	.21**	-.24**	.00	.31**	-.13**	-.15**	-.20**	.19**	.29**	.74**	-		
NBJC-ME	.17**	.27**	.16**	-.20**	.01	.29**	-.11**	-.15**	-.16**	0.09*	.18**	.59**	.77**	-	
NBJC-AF	.15**	.22**	.14**	-.14**	-.03	.26**	-.12**	-.15**	-.15**	0.08*	.14**	.36**	.45**	.52**	-

Note. CE = Energy household clarity; HA = Health awareness; MA = Mindful awareness; SCC = Self-concept clarity; TP = Time pressure; VIT = Vitality; FAT-P = Physical work fatigue; FAT-M = Mental work fatigue; FAT-E = Emotional work fatigue; NBJC = Needs-based job crafting with subscales: NBJC-D = Detachment, NBJC-R = Relaxation, NBJC-AU = Autonomy, NBJC-MA = Mastery, NBJC-ME = Meaning, NBJC-AF = Affiliation. ** $p < .001$. * $p < .05$.

Appendix B

Scales Used To Measure The Core Variables (English Translation)

Energy Household Clarity

This question is about your knowledge of your daily energy levels and the factors that influence them.

[1 = does not apply at all; 5 = applies completely]

1. I know what my energy levels depend on throughout the day.
2. I am aware of the factors that influence my daily energy levels.
3. I have a clear idea of which influences are particularly significant for my energy levels throughout the day.
4. I have a clear picture of my daily energy levels.
5. I am aware of how I can influence my energy levels throughout the day.
6. I have a clear idea of how I can influence my daily energy levels.
7. I know when measures are needed to counteract my energy loss throughout the day.

Mindful Self-Care

Please indicate how often you have exhibited the following behavior in the past week.

[1 = never (0 days) ; 5 = regularly (6 to 7 days)]

Mindful relaxation:

1. I relaxed through mental or intellectual activities, e.g., reading a book or writing something.
2. I relaxed through interpersonal activities, e.g., meeting up with friends.
3. I was creative to relax, e.g., painting or drawing, playing an instrument, creative writing, singing, or organizing something.
4. I listened to something to relax, e.g., music, podcasts, radio programs, or rainforest sounds.
5. I looked for relaxing images, e.g., art, film, window shopping, or being in nature.

6. I looked for relaxing smells, e.g., body oils, essential oils, scented candles, incense, smells from baking or cooking, or from being in nature.

Physical Care:

7. I drank at least 6 to 8 cups of water.

8. My meals included a variety of high-quality foods, e.g., vegetables, high-quality protein, fruits, and grains.

9. I consciously planned my meals and snacks.

10. I engaged in at least 30 to 60 minutes of physical activity.

11. I participated in sports, participated in dance or other planned physical activities, e.g., team sports, dance classes.

12. I performed sedentary activities instead of moving, e.g., watching TV, working on a screen (reverse score).

13. I sat continuously for periods of more than 60 minutes (reverse score).

14. I planned and scheduled physical activities for the day.

Supportive Relationships:

15. I spent time with people who were good for me, e.g., supporting, encouraging, and believing in me.

16. I felt supported by people in my life.

17. I felt that I had someone who would listen to me if I was upset about something, e.g., a friend, a counselor, or a group.

18. I felt confident that the people in my life would respect my choice if I said "no" to something.

19. I planned/scheduled time with people who were special to me.

Supportive Structures:

- 20. I organized my work or school work in a way that supported me in completing my work or school assignments.
- 21. I maintained a manageable schedule.
- 22. I maintained a balance between the demands of others and what is important to me.
- 23. I maintained a comfortable and enjoyable living environment.

Mindful Self-Awareness

- 24. I was calmly aware of my thoughts.
- 25. I was calmly aware of my feelings.
- 26. I was calmly aware of my body.
- 27. I carefully chose which of my thoughts and feelings guided my actions.
- 28. I kindly acknowledged my own challenges and difficulties.
- 29. I engaged in supportive and comforting self-talk, for example, by saying to myself, "My effort is valuable and meaningful."
- 30. I reminded myself that failures and challenges are part of human life.
- 31. I allowed myself to feel my feelings, for example, allowing myself to cry.
- 32. I experience meaning and/or greater significance in my professional or academic life.
- 33. I experience meaning and/or greater significance in my private/personal life.

General:

- 34. I utilize a variety of self-care strategies.
- 35. I planned my self-care activities.
- 36. I explored new ways to bring self-care into my life.

Health Awareness

The following statements cover the topic of recovery self-management and mindfulness.

Please rate the extent to which you agree with the following statements.

[1 = strongly disagree; 5 = strongly agree]

1. I notice in good time when I need a rest break.
2. I consciously pay attention to health warning signs
3. I notice when I'm reaching my health limits

Self-Concept Clarity

Below, you are asked to rate the following questions about your personality. Please check the appropriate boxes.

[1 = not at all applicable; 5= very applicable]

1. My attitudes about myself often conflict with each other.
2. Some opinions about myself change from day to day.
3. I spend a lot of time trying to figure out what kind of person I really am.
4. Sometimes I feel like I'm not really the person I claim to be.
5. When I think about it, I'm not so sure what kind of person I really was in the past.
6. I rarely feel conflict between the different aspects of my personality.
7. Sometimes I think I know other people better than myself.
8. My opinions about myself change frequently.
9. If I were to describe my personality, the description would be different from day to day.
10. Even if I wanted to, I couldn't say exactly what I'm really like.
11. In general, I have a clear picture of who and what I am.
12. It's often difficult for me to make decisions because I don't know exactly what I really want.

Time Pressure

The following questions relate to your working conditions. Please indicate to what extent you agree with the following statements.

[1 = very rarely/never; 5 = very often]

1. How often are you under time pressure?
2. How often do you work faster than you normally would in order to get the work done?
3. How often do you skip breaks or take them late because you have too much work to do?
4. How often do you leave work late because you have too much work to do?
5. How often is a fast pace required in your work?

Vitality

The questions on this and the following two pages relate to your general well-being. Please indicate the extent to which each statement generally applies to you.

[1 = not at all true; 5 = completely true]

1. I feel alive and vital.
2. I feel full of energy.
3. I feel awake and alert.
4. I have energy and a zest for life.
5. I look forward to each new day.
6. I feel alert and awake almost all the time.
7. I feel energized.

Work Fatigue

Think back to the last 3 months. How often did you... at the end of a workday...

[1 = never; 5 = always]

Physical Vitality:

1. ...feel physically exhausted?
2. ...have difficulty continuing to be physically active?

3. ...feel physically drained?
4. ...want to “switch off” physically?
5. ...feel physically exhausted?
6. ...want to avoid anything that requires too much physical energy?

Mental Vitality:

7. ...feel mentally exhausted?
8. ...have difficulty thinking and concentrating?
9. ...feel mentally drained?
10. ...want to switch off mentally?
11. ...feel mentally drained?
12. ...want to avoid anything that consumed too much mental energy?

Emotional Vitality:

13. ...feel emotionally exhausted?
14. ...have difficulty showing emotions and dealing with emotions?
15. ...feel emotionally drained?
16. ...want to switch off emotionally?
17. ...feel emotionally drained?
18. ...want to avoid anything that consumed too much emotional energy?

Need-Based Job Crafting

How often have you consciously and actively aligned your working time with your goals in the past month?

[1 = never; 5= very often]

Detachment:

1. I have designed my work so that I mentally detach myself from work-related thoughts during my free time.
2. I have designed my work so that I distance myself from work-related tasks during my free time.
3. I have organized my work so that I switch off from professional duties during my free time.

Relaxation:

4. I have planned my work so that I can relax my body and mind during my free time.
5. I have planned my work so that I reduce stress during my free time.
6. I have designed my work so that I rest during my free time.

Autonomy:

7. I have planned my work so that I experience a sense of control.
8. I have designed my work so that I determine my own actions.
9. I have ensured that I do things in my work that reflect what I really want in my job.

Mastery:

10. I have designed my work so that I feel competent in the things I do.
11. I have planned my work so that I can familiarize myself with new ideas and expand my knowledge or interests.
12. I have organized my work so that I can put my skills or knowledge into practice at work.

Meaning:

13. I have ensured that I experience meaning in my work.

14. I have organized my work so that I experience my professional activities as meaningful.

15. I designed my work so that I align my professional actions with my values.

Affiliation:

16. I ensured that I experience a close connection with the people around me at work.

17. I designed my work so that I experience a sense of belonging to the people in my work environment.

18. I planned my work so that I feel connected to the people in my professional environment.