

Teleworkers` Leisure Crafting, Needs Satisfaction and Meaningful Work

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Abstract

Telework has widely spread increasing the flexibility, job satisfaction and productivity of employees as well as leading to poor social interactions, conflict at home and emotional exhaustion. Leisure crafting was found to address those adverse outcomes which was established in the telework context for attenuating emotional exhaustion. Due to uncertainty on the labor market, there is a demand for meaningful work. A few studies show that leisure crafting increases meaning-making and meaningful activities enhance meaning in life, mediated by basic needs satisfaction. The present study is applied to teleworkers and adds to the small research body of crafting in the leisure domain that examines the interplay between occupation and well-being with regards to leisure crafting, needs satisfaction and meaningful work. A cross-sectional survey study (N = 69) was conducted. Neither leisure crafting was significantly correlated with meaningful work, nor did needs satisfaction mediate this relationship. However, there was a significant relationship between needs satisfaction and meaningful work which implies that this link within the Meaningful Activity and Life Meaning model may also be applicable in the work domain. Another implication is that meaningful work may be added as a distinct outcome variable within the identity-based integrative needs model of crafting. The effect of leisure crafting on meaning-making may be impeded due to the autonomy supportive environment of teleworkers. Future research may identify particular unfulfilled needs and match them with particular crafting efforts.

Keywords: leisure crafting, telework, needs satisfaction, meaningful work

Teleworkers` Leisure Crafting, Needs Satisfaction and Meaningful Work

Telework has widely spread increasing the flexibility and productivity of employees (Kelliher & Anderson, 2010; Choudhury et al., 2021; Beauregard et al., 2019). As countries globally imposed lockdowns restricting particularly physical contact, around 50% of the working population in the United States and in Germany started teleworking (Abdel et al., 2021). Telework can be defined as working distant from the main workplace of the organization in a technologically connected way (Bailey & Kurland, 2002). For instance, teleworkers may work from a café. In this thesis, there will be a focus on teleworkers who work from home and partly from the location of the main workplace. Telework means high flexibility and autonomy for workers because they can design their work schedules and work environment more independently. Moreover, it was found to increase job satisfaction, organizational commitment (Kelliher & Anderson, 2010), and productivity (Choudhury et al., 2021; Beauregard et al., 2019) as there may be less distractions from coworkers and shorter travel times between the home residence and the location of the main workplace (Kelliher & Anderson, 2010).

However, work flexibility may also increase tensions (Cañibano, 2019). The drawbacks of telework are poor social interactions, vague work-life boundaries and conflict at home (Boell et al., 2016). Emotional exhaustion has been rising among teleworkers which plays a crucial role in burnout and is related to depression. Emotional exhaustion is defined by reduced emotional resources and feelings of overextension (Abdel et al., 2021). For teleworkers, there is evidence for higher work intensity but there is mixed evidence as to whether teleworkers are more likely to experience stress (Kelliher & Anderson, 2010). Teleworkers face difficulties in teamwork including sharing understanding and implicit knowledge (Beauregard et al., 2019). Moreover, little social and informal interactions at work may elicit feelings of isolation and reduce job satisfaction (Beauregard et al., 2019). Teleworkers were found to have dwindling work-life boundaries which can give rise to work-life or work-family conflicts (Beauregard et al., 2019). Work-family conflict was found correlated with poor life satisfaction and poor job satisfaction (Beauregard et al., 2019).

Tensions in telework context may present a needs discrepancy within a generally autonomy supportive environment of teleworkers where crafting according to the identity-based integrative needs model of crafting is particularly effective (De Bloom et al., 2020). Based on self-determination theory (SDT), needs can be satisfied when crafting processes match a person`s needs discrepancy, ultimately leading to an internalization process and higher well-being (De Bloom et al., 2020). Remarkably, those leisure activities which are also demanding and not just relaxing reduce the experience of job stress and help to detach from work by promoting companionship and positive mood (Petrou & Bakker, 2016). For instance, leisure crafting was found to attenuate emotional

exhaustion (Abdel et al., 2021), improve job satisfaction, life satisfaction, subjective well-being and target social isolation (Petrou & Bakker, 2016; De Bloom et al., 2020). Leisure crafting is defined as the “proactive behavior during leisure time targeted at goal setting, human connection, learning, and personal development” (Petrou & Bakker, 2016, p. 507). The evidence shows that leisure crafting contributes to the positive development of work-life boundaries which in turn reduces work-family conflict (Abdel et al., 2021). Finally, leisure crafting has been found to have a positive effect on meaning-making (Petrou et al., 2017).

Due to the current uncertainty in the labor market, there has been an increasing demand for meaning and meaningful work (Allan & Liu, 2020). Meaningful work is a major part of a meaningful life (Autin et al., 2022) and can be defined as the subjective experience of meaning in work, a sense that work is crucial for making meaning and the perception whether their work serves the greater good (Steger et al., 2012). As the world has been confronted with the COVID-19 pandemic followed by the war on Ukraine, survivors' meaning systems may have been challenged. Meaning has been found to inversely predict psychological distress, mediated by fear of the unknown (Ostafin et al., 2021). During the COVID-19 pandemic, meaning was found to have a vital role in coping with social isolation and anxiety (Milner & Echterling, 2021). Industrialization, automation and shifting societal values make the future for workers who pursue meaningful work increasingly difficult and uncertain (Allan & Liu, 2020). Therefore, meaningful work acts for teleworkers both preventive of work stress, anxiety and burnout and as a coping mechanism to deal with social isolation and uncertainty (Correia & Almeida, 2020; Steger et al., 2012). Moreover, meaningful work was found to predict job satisfaction (Allan & Liu, 2020), work motivation (Allan & Liu, 2020), subjective well-being and life satisfaction (Autin et al., 2022).

The identity-based integrative needs model of crafting suggests that needs satisfaction mediates the effect of crafting on optimal functioning (De Bloom et al., 2020). The Meaningful Activity and Life Meaning model reflects this mediation role of needs satisfaction. Next to a direct effect of meaningful leisure activities on meaning in life, according to the model, there is an indirect path with needs satisfaction as a mediator of the relationship between meaningful leisure activities and meaning in life (Eakman, 2013). As the environment may not always allow to immediately craft for a discrepancy within the same domain (i.e. work domain), crafting in another domain (i.e. leisure domain) could increase optimal functioning across domains which is explained with the compensation or spill-over theory as discussed below in the literature review (De Bloom et al., 2020). Therefore, needs satisfaction may mediate the relationship between leisure crafting and meaningful work.

Previous research has mainly focused on job crafting and there has been a call for more research in the nonwork domain with its implications for need satisfaction and well-being (De Bloom et al., 2020). Leisure

crafting was already found to be beneficial in the telework context, for instance by attenuating emotional exhaustion (Abdel et al., 2021). Given the current uncertainty and work stress for teleworkers, there is a demand for meaningful work (Allan & Liu, 2020). So far, there has been evidence that leisure crafting increases meaning-making in the work domain (Petrou et al., 2017). Adding to existing research, in this study, it will be examined whether that link between leisure crafting and meaning in the work domain also holds for the telework context. Moreover, research has been conducted showing that meaningful activities enhance meaning in life and that this relationship is mediated by basic needs satisfaction (Eakman, 2013). In this study, it will be investigated whether these relationships are also present across identity domains. Needs satisfaction was also found to mediate the relationship between crafting and optimal functioning or well-being (De Bloom et al., 2020). In the present study, it will be discussed whether meaningful work can be another outcome variable extending the identity-based integrative needs model of crafting. Considering the tensions and uncertainty in the telework context as well as teleworkers intertwined nature of work and leisure domains, the present study takes an integrative approach examining the relationships between leisure crafting, needs satisfaction and meaningful work, and thus as well investigates a possible intervention.

Literature Review

Leisure Crafting and Meaningful Work in Teleworkers

As derived from the Meaningful Activity and Life Meaning model, meaningful activity was found to be associated with meaning in life (Eakman, 2013). Similarly, within the field of positive psychology, passionate leisure activity was found related with presence of meaning (Zhang et al., 2014), and leisure was found to have an important role in meaning-making (Iwasaki et al., 2018). The link between activities in the leisure domain and meaning-making was also established in a global and multicultural context (Iwasaki, 2008). The main roles of leisure-like pursuits in meaning-making are facilitating positive emotions and identities, social connections, human strengths and learning and human development (Iwasaki, 2008). As leisure crafting per definition focuses on social connections, learning and human development, meaning-making seems partially inherent to leisure crafting. As unfulfilled callings in the work domain were found to be a motivation for leisure crafting (De Bloom et al., 2020), the question arises whether leisure crafting actually increases meaning in the work domain.

First, it can be taken into account that there may be a bidirectional relationship between leisure crafting and meaningful work. Regarding the way leisure and work domain influence each other, there are two different hypotheses prevalent in the literature. The spillover hypothesis states that positive experiences in one domain (i.e. leisure) reoccur in another domain (i.e. work) (Petrou & Bakker, 2016). In contrast, the compensation

hypothesis suggests that unattained goals in one domain (i.e. work) can be reached through behavior within the other domain (i.e. leisure). Leisure activity has the potential to compensate for negative life events in the work domain (Petrou & Bakker, 2016). With regards to the research question, there may be a spillover effect from the leisure domain into the work domain. Through leisure crafting people learn to choose and attain goals, set boundaries, connect with people and have meaningful experiences in a way that serves their well-being. This positive experience may be repeated in the work domain. However, human connection within remote work has its limitations.

Indeed, leisure crafting was found to lead to meaning-making in the work domain (Petrou et al., 2017). By adopting the autonomy to telework, an important structural resource within job crafting is provided. There is evidence that leisure crafting particularly affects meaning-making when there are few opportunities for job crafting. However, next to job autonomy, another crucial aspect of job crafting are social job resources such as the opportunities for feedback and social interactions (Petrou et al., 2017). Social job resources are restricted for teleworkers due to the virtual work environment. Therefore, leisure crafting may affect meaning in the work domain leading to the following hypothesis.

Hypothesis 1. Leisure crafting will be positively correlated with meaningful work for teleworkers.

Need Satisfaction, Leisure Crafting and Meaningful Work in Teleworkers

According to the two-process model of needs, needs discrepancies are motives for crafting which, in turn leads to needs satisfaction (De Bloom et al., 2020). Importantly, there has been a link established between leisure crafting and needs satisfaction (Petrou & Bakker, 2016). A large research body demonstrates that just a few needs capture the core features of human nature (Tooby & Cosmides, 1990). The three main universal needs are the need for autonomy, the need for relatedness and the need for competence. Out of those needs, the need for autonomy and the need for relatedness may be most correlated with leisure crafting (Petrou & Bakker, 2016). One may argue that teleworkers need for autonomy is already satisfied and thus not much improved by engaging in leisure crafting. However, as teleworkers face increasing work intensity, their need for flexibility may also grow in order to find balance (Kelliher & Anderson, 2010). It has also been found that the need for relatedness may play a larger role in the non-work domain (De Bloom et al., 2020). Therefore, leisure crafting may be effective in satisfying needs for relatedness and thus countering feelings of social isolation.

That needs satisfaction mediates the relationship between crafting and optimal functioning is well established in the literature and conceptualized by the identity-based integrative needs model of crafting (Rudolph et al., 2017; Van den Broeck et al., 2016; De Bloom et al., 2020). For instance, based on the

application of SDT in the organizational context, Deci et al. (2017) established that satisfaction of the basic psychological needs relates to the internalization of work motivation and to well-being. The Meaningful Activity and Life Meaning model reflects the mediation role of basic needs satisfaction. Next to a direct effect of meaningful leisure activities on meaning in life, according to the model, there is an indirect path with needs satisfaction as a mediator of the relationship between meaningful leisure activities and meaning in life. This has been first established through structural equation modeling (Eakman, 2013) and later validated through a longitudinal study design (Eakman, 2014). Finally, need satisfaction has been found to predict meaningful work, especially the needs for autonomy and competence (Autin et al., 2022), leading to the following hypothesis.

Hypothesis 2. Need satisfaction will mediate the relationship between leisure crafting and meaningful work for teleworkers.

Methods

Participants

From the 108 working adults who responded to our study, 69 participants remained for further consideration which means that they understand written English, gave informed consent, filled out the questionnaire completely and work at least 20 hours per week from which at least 4 hours are conducted from home. Out of the 69 participants (34 females, 34 males, 1 non-binary), there are two modi with regards to the distribution of age ranges (22 participants age 25-34 and 22 participants age 45-54). Sixty-five percent of the participants live currently in Germany, 11.5% in the Netherlands and 5.8% in the United States of America. Eighty-four percent of the participants hold at least a bachelor's degree. The major job sectors of the participants are Information Technology (20.3%), Health Care and Social Services (14.5%) and Finance (13%). Our study was approved by the Ethics Committee Psychology of the University of Groningen.

Research Design and Procedure

The design of our study was a cross-sectional survey study. Each member of our research group distributed a message and the Qualtrics-link to the questionnaire via social media platforms such as LinkedIn, WhatsApp, Instagram and Facebook. The message described our inclusion criterion for the study and signaled that forwarding the study invitation is appreciated. Therefore, we used a convenience sample. Filling out the questionnaire took approximately 15 minutes. The questionnaire started with a short introduction about the research being conducted, a note that no monetary compensation for participation will be provided and asked for consent. This was followed by the concepts and corresponding items being investigated. Each concept was introduced with a short definition of the concept in common language. The variables were displayed in the

following order: leisure crafting, life satisfaction, needs satisfaction, perceived work productivity, psychological detachment, work-family conflict and meaningful work. Within the section of the items for perceived work productivity, there was a validation question included. The variables were followed by demographical questions and in the end, participants had the option to provide their email address to receive the study results. Data collection lasted for 24 days.

Measures

For my research, I used the concepts of leisure crafting, needs satisfaction and meaningful work out of the seven variables which our research group investigated. Aiming for quality of measures, we conducted a pilot testing and inserted a validation question. Moreover, we explained each variable shortly in common language. Reliability of measures was suggested to be acceptable for scales with Cronbach's alpha higher than .7 and reasonably good for scales with Cronbach's alpha higher than .8 (Gliem & Gliem, 2003). Therefore, the scales used in this study can be seen as reliable (Leisure crafting $\alpha = .86$, needs satisfaction $\alpha = .82$, meaningful work $\alpha = .78$). The complete scales with all the items of the three measures are in the appendix.

Leisure Crafting

For leisure crafting, we provided an example to help participants grasp this construct. The nine items from Petrou and Bakker (2016) were scored on a 5-point Likert-scale (1 = *not at all* to 5 = *very much*). An example item is: "I try to build relationships through leisure crafting". Three questions regarding the type, frequency and situation of participants' leisure crafting were added with free response options.

Need Satisfaction

The need satisfaction scale use consists of nine items across three categories: autonomy, competence and relatedness. The items were derived from Sheldon (2001) and scored on a 5-point Likert-scale (1 = *strongly disagree* to 5 = *strongly agree*). Each category was introduced by: "Reflecting on your life in general...". This phrase is slightly modified from Sheldon's (2001) original version. An example item is: "I feel that my choices are based on my true interests and values".

Meaningful Work

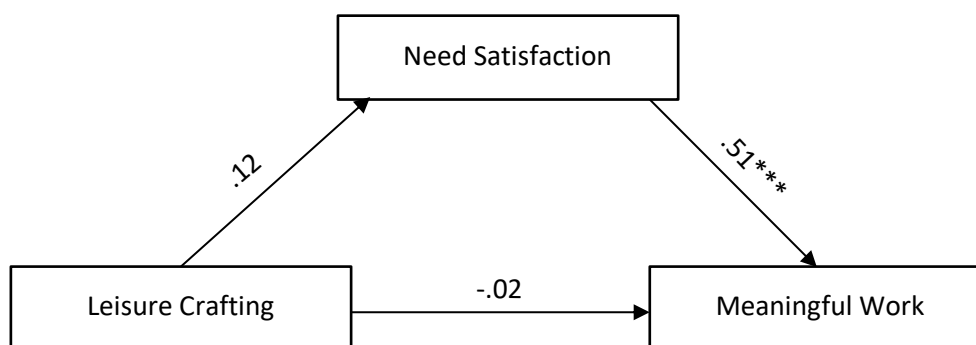
For the meaningful work scale, the ten items of the Work as Meaning Inventory (WAMI) from Steger et al. (2012) were scored on a 5-point Likert-scale (1 = *absolutely untrue* to 5 = *absolutely true*). An example item is: "I have a good sense of what makes my work meaningful". Without the reversed item "My work really makes no difference to the world.", the internal consistency of the scale would be significantly higher ($\alpha = .88$ compared to $\alpha = .78$). This may be an indication of response bias or language barriers.

Results

The Process mediation regression yielded the following results. Neither the direct path between leisure crafting and meaningful work was significant, nor the indirect path between leisure crafting and meaningful work with needs satisfaction as a mediator. Therefore, the statistical requirement for mediation which is a significant indirect effect (Hayes, 2022), is not fulfilled. Nevertheless, the model explains 22% of the observed variability of meaningful work ($R^2 = .22$). The associations between each construct are depicted in Figure 1 below. As can be seen in Figure 1, the only significant relationship within the model is between needs satisfaction and meaningful work $b = .51$, $SE_b = .12$, $t(66) = 4.24$, 95% CI [.27, .75].

Figure 1

Process Mediation Model of Associations Between Leisure Crafting, Need Satisfaction and Meaningful Work



Note. The mediation analysis shows the direct association between leisure crafting and meaningful work as well as the indirect path with need satisfaction as a possible mediator. The associations presented are unstandardized linear regression coefficients.

*** $p < .001$.

Discussion

Previous research has mainly focused on job crafting and there has been a call for more research in the nonwork domain with its implications for need satisfaction and well-being (De Bloom et al., 2020). Leisure crafting was already found to be beneficial in the telework context, for instance by attenuating emotional exhaustion (Abdel et al., 2021). Given the current uncertainty and work stress for teleworkers, there is a demand for meaningful work (Allan & Liu, 2020). The main roles of leisure-like pursuits in meaning-making are facilitating positive emotions and identities, social connections, human strengths and learning and human

development (Iwasaki, 2008). As leisure crafting per definition focuses on social connections, learning and human development, meaning-making seems partially inherent to leisure crafting. Regarding the way leisure and work domain influence each other, there are two different hypotheses prevalent in the literature. The spillover hypothesis states that positive experiences in one domain (i.e. leisure) reoccur in another domain (i.e. work) (Petrou & Bakker, 2016). In contrast, the compensation hypothesis suggests that unattained goals in one domain (i.e. work) can be reached through behavior within the other domain (i.e. leisure). So far, there has been evidence that leisure crafting increases meaning-making in the work domain (Petrou et al., 2017) which is a spillover effect. Adding to existing research, in this study, it will be examined whether that link between leisure crafting and meaning in the work domain also holds for the telework context. Moreover, research has been conducted showing that meaningful activities enhance meaning in life and that this relationship is mediated by basic needs satisfaction (Eakman, 2013). In this study, it will be investigated whether these relationships are also present across identity domains. Needs satisfaction was also found to mediate the relationship between crafting and optimal functioning or well-being (De Bloom et al., 2020). In the present study, it will be discussed whether meaningful work can be another outcome variable extending the identity-based integrative needs model of crafting. Considering the tensions and uncertainty in the telework context as well as teleworkers intertwined nature of work and leisure domains, the present study takes an integrative approach examining the relationships between leisure crafting, needs satisfaction and meaningful work which led to the following two hypotheses.

Hypothesis 1. Leisure crafting will be positively correlated with meaningful work for teleworkers.

Hypothesis 1 was not supported by the data, there was no significant relationship between teleworkers' leisure crafting and meaningful work found in this study. Previous research found an effect of leisure crafting on meaning-making in the work domain (Petrou et al., 2017). For teleworkers, this relationship between leisure crafting and meaningful work including the subscale meaning-making could not be established. Generally, the autonomy supportive environment of teleworkers may be ideal for crafting to be effective (De Bloom et al., 2020), but also weakens the effect of leisure crafting on meaning-making (Petrou et al., 2017). By adopting the autonomy to telework, an important structural resource within job crafting is provided. However, there is evidence that leisure crafting particularly affects meaning-making when there are few opportunities for job crafting. Another aspect of job crafting are social job resources such as the opportunities for feedback and social interactions (Petrou et al., 2017). Social job resources are restricted for teleworkers due to the virtual work environment. This restriction may enhance the effect of leisure crafting on meaning-making but may as well impede spillover effect from the leisure domain into the work domain. Through leisure crafting people learn to

choose and attain goals, set boundaries, connect with people and have meaningful experiences in a way that serves their well-being. This positive experience may be difficult to be transferred and repeated in the work domain due to limited possibilities of human connection within telework.

A critical look on meaningful work reveals further evidence against Hypothesis 1. While meaningful work has mostly been found to be a desirable outcome, the downside of a job calling is that it may feel like a moral duty to follow that (Bunderson, 2009) leading employees to exhaust their capacities (Correia & Almeida, 2020). In such cases, employees tend to sacrifice personal time or pay, at times without even noticing (Bunderson, 2009). Therefore, people who find a lot of meaning in their work may have little capacities left to engage in leisure crafting suggesting an inverse relationship between leisure crafting and meaningful work which may explain the slightly negative correlation that was found.

Hypothesis 2. Need satisfaction will mediate the relationship between leisure crafting and meaningful work for teleworkers.

Hypothesis 2 was not supported by the data, there was no significant indirect path between leisure crafting and meaningful work with needs satisfaction as a mediator found in this study. However, there was a significant relationship found between needs satisfaction and meaningful work. This is in line with previous research on the effects of need satisfaction on meaningful work which were found especially strong for the need for autonomy and the need for competence (Autin et al., 2022). A closer look on the relationship between leisure crafting and basic needs satisfaction may explain the non-significant result that was found in this study. It has been found that out of the three basic needs the need for autonomy and the need for relatedness are correlated with leisure crafting but not the need for competence (Petrou & Bakker, 2016). The need for relatedness may play a large role in the non-work domain (De Bloom et al., 2020). Therefore, leisure crafting seems promising in satisfying needs for relatedness and thus countering feelings of social isolation of teleworkers. However, one may argue that teleworkers need for autonomy is already satisfied through their flexibility at work (Boell et al., 2016) and thus not significantly more satisfied by engaging in leisure crafting.

Theoretical and Practical Implications

The theoretical implications of this study add to the small research body of crafting in the leisure domain and concern the interplay between occupation and well-being. The significant relationship found between needs satisfaction and meaningful work is in line with the identity-based integrative needs model of crafting and the Meaningful Activity and Life Meaning model and demonstrates that this link can be applied to teleworkers. One implication is that the Meaningful Activity and Life Meaning model may also be applicable in

the work domain. Another implication is that meaningful work may be added as a distinct outcome variable within the identity-based integrative needs model of crafting. The non-significant relationships found between leisure crafting and either needs satisfaction or meaningful work may be explained through the autonomy of teleworkers. Teleworkers need for autonomy may already be satisfied through their flexibility at work (Boell et al., 2016) and the already autonomy supportive environment of teleworkers may impede the effect of leisure crafting on meaning-making (Petrou et al., 2017).

As there was no significant correlation between leisure crafting and meaningful work found, the spillover hypothesis could not be supported in the present study. Instead, many participants reported that they engage in leisure crafting mostly after work as a compensation if they are not too exhausted from work which is exemplified by one participant's statement: "It is difficult to concentrate on leisure activities because I am exhausted by my work". Therefore, crafting in the leisure domain may compensate for stress experienced in the work domain (De Bloom et al., 2020). Particularly, high working standards of teleworkers who pursue meaningful work may not be met at work because of emotional exhaustion and stress but rather compensated for through leisure crafting. Therefore, the compensation hypothesis seems more plausible in this context and stress at work may impact the quality of leisure crafting.

Crafting efforts may only be effective when aligned with the corresponding unfulfilled needs (De Bloom et al., 2020). For instance, stay-at-home mothers were found to engage in leisure crafting to escape their work-family conflict which points out that intention matters (Pöllänen & Voutilainen, 2018). The needs discrepancy of teleworkers may be related to poor social interactions, vague work-life boundaries and conflict at home (Boell et al., 2016). Therefore, as an example, immersing oneself in drawings may fall under the leisure crafting definition but it may not be an effective approach for a teleworker to address their feelings of social isolation. Future research may take a more nuanced approach linking particular needs with particular crafting efforts. A practical solution may be to categorize needs discrepancies and crafting efforts into approach or avoidance mechanisms (De Bloom et al., 2020).

Therefore, the first practical implications of this study is the recommendation to identify unfulfilled needs before planning further crafting efforts. Hereby, crafting processes on the individual-level and on the level of organizational interventions and wider occupational programs perfectly complement each other across work and leisure domains (De Bloom et al., 2020). This may not just be relevant for teleworkers but for any work context. Teleworkers who pursue a meaningful career, may be aware of indications of exhaustions, may set clear

boundaries between work and life or family domain, may especially take care of their need for relatedness and be intentional with how to engage in life and leisure.

Strengths, Limitations and Future Directions

The strengths of this study are that it sheds light on tensions within the telework context and that the study adds to the small research body on leisure crafting, needs satisfaction and meaningful work. Moreover, internally consistent measures were applied and the findings have important implications for the identity-based integrative needs model of crafting, the Meaningful Activity and Life Meaning model and the Compensation or Spillover theory. Finally, this study is an example of a paper with mainly non-significant results which may encourage others to publish all of their findings and therefore reducing publication bias.

With regards to the limitations of this study and future directions, data collection has been challenging leading to a relatively small sample size ($N = 69$). As this study was a cross-sectional survey study, future research may establish causality such as through a longitudinal design. Although, we defined leisure crafting in common language and provided an example, there may have been inconsistencies concerning participants' understanding of the leisure crafting concept. Without the reversed item "My work really makes no difference to the world.", the internal consistency of the WAMI scale would be significantly higher ($\alpha = .88$ compared to $\alpha = .78$) which may be an indication of response bias or language barriers. As there is evidence that those leisure activities which are also demanding and not just relaxing reduce the experience of job stress and help to detach from work by promoting companionship and positive mood (Petrou & Bakker, 2016), future research may focus more on the compensation effects of leisure crafting and positive mood may be an interesting variable to include in a model. Finally, future research on telework may establish more links with SDT. For instance, autonomous motivation was found to mediate the relationship between the needs for relatedness and autonomy, and meaningful work (Autin et al., 2022).

Conclusions

Due to the autonomy supportive environment of teleworkers, the effect of leisure crafting on meaning-making may be impeded (Petrou et al., 2017). Nevertheless, teleworkers' needs satisfaction promotes meaningful work. High working standards of teleworkers who pursue meaningful work may lead to life satisfaction but also to emotional exhaustion and may be compensated for through leisure crafting. The first step of needs satisfaction is identifying unfulfilled needs. What do you need from the people around you? Ask for it. It may be for the greater good.

References

- Abdel Hadi, S., Bakker, A. B., & Häusser, J. A. (2021). The role of leisure crafting for emotional exhaustion in telework during the COVID-19 pandemic. *Anxiety, Stress, & Coping*, 34(5), 530-544.
- Allan, B. A., & Liu, T. (2020). Transitions in an uncertain labor market: Implications for meaningful work. In E. M. Altmaier (Ed.), *Navigating life transitions for meaning*. (pp. 91–104). Elsevier Academic Press. <https://doi-org.proxy-ub.rug.nl/10.1016/B978-0-12-818849-1.00006-0>
- Autin, K. L., Herdt, M. E., Garcia, R. G., & Ezema, G. N. (2022). Basic psychological need satisfaction, autonomous motivation, and meaningful work: A self-determination theory perspective. *Journal of Career Assessment*, 30(1), 78–93. <https://doi-org.proxy-ub.rug.nl/10.1177/10690727211018647>
- Bailey, D. E., & Kurland, N. B. (2002). A review of telework research: Findings, new directions and lessons for the study of modern work. *Journal of Organizational Behavior*, 23(SpecIssue), 383–400. <https://doi-org.proxy-ub.rug.nl/10.1002/job.144>
- Beauregard, T. A., Basile, K. A., & Canonico, E. (2019). Telework: Outcomes and facilitators for employees. In R. N. Landers (Ed.), *The Cambridge handbook of technology and employee behavior*. (pp. 511–543). Cambridge University Press. <https://doi-org.proxy-ub.rug.nl/10.1017/9781108649636.020>
- Boell, S. K., Cecez-Kecmanovic, D., & Campbell, J. (2016). Telework paradoxes and practices: the importance of the nature of work. *New Technology, Work and Employment*, 31(2), 114-131. doi:10.1111/ntwe.12063
- Bunderson, J. S., & Thompson, J. A. (2009). The call of the wild: Zookeepers, callings, and the double-edged sword of deeply meaningful work. *Administrative Science Quarterly*, 54(1), 32–57. <https://doi-org.proxy-ub.rug.nl/10.2189/asqu.2009.54.1.32>
- Cañibano, A. (2019). Workplace flexibility as a paradoxical phenomenon: Exploring employee experiences. *Human Relations*, 72(2), 444–470. <https://doi-org.proxy-ub.rug.nl/10.1177/0018726718769716>
- Choudhury, P. (Raj), Foroughi, C., & Larson, B. (2021). Work-from-anywhere: The productivity effects of geographic flexibility. *Strategic Management Journal*, 42(4), 655–683. <https://doi-org.proxy-ub.rug.nl/10.1002/smj.3251>
- Correia, I., & Almeida, A. E. (2020). Organizational justice, professional identification, empathy, and meaningful work during COVID-19 pandemic: Are they burnout protectors in physicians and nurses? *Frontiers in Psychology*, 11. <https://doi-org.proxy-ub.rug.nl/10.3389/fpsyg.2020.566139>

- De Bloom, J., Vaziri, H., Tay, L., & Kujanpää, M. (2020). An identity-based integrative needs model of crafting: Crafting within and across life domains. *Journal of Applied Psychology*, 105(12), 1423.
- Deci, E. L., Olafsen, A. H., Ryan, R. M. (2017). Self-Determination Theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4(1), 19–43. <https://doi-org.proxy-ub.rug.nl/10.1146/annurev-orgpsych-032516-113108>
- Eakman, A. M. (2013). Relationships between meaningful activity, basic psychological needs, and meaning in life: Test of the meaningful activity and life meaning model. *OTJR: Occupation, Participation and Health*, 33(2), 100–109. <https://doi-org.proxy-ub.rug.nl/10.3928/15394492-20130222-02>
- Eakman, A. M. (2014). A prospective longitudinal study testing relationships between meaningful activities, basic psychological needs fulfillment, and meaning in life. *OTJR: Occupation, Participation and Health*, 34(2), 93–105.
- Gliem, J.A. & Gliem, R.R. (2003). Calculating, interpreting and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research to Practice Conference in Adult, Continuing, and Community Education. Retrieved 2022, from <https://scholarworks.iupui.edu/bitstream/handle/1805/344/Gliem%20%26%20Gliem.pdf?sequence=1&isAllowed=y>
- Hayes, A. F. (2022). Introduction to mediation, moderation, and conditional process analysis : a regression-based approach (Third, Ser. Methodology in the social sciences). Guilford Press. Retrieved 2022, from <https://ebookcentral.proquest.com/lib/rug/reader.action?docID=6809031>
- Iwasaki, Y., Messina, E. S., & Hopper, T. (2018). The role of leisure in meaning-making and engagement with life. *The Journal of Positive Psychology*, 13(1), 29–35. <https://doi-org.proxy-ub.rug.nl/10.1080/17439760.2017.1374443>
- Iwasaki, Y. (2008). Pathways to meaning-making through leisure-like pursuits in global contexts. *Journal of Leisure Research*, 40(2), 231–249.
- Kelliher, C., & Anderson, D. (2010). Doing more with less? Flexible working practices and the intensification of work. *Human Relations*, 63(1), 83–106. <https://doi-org.proxy-ub.rug.nl/10.1177/0018726709349199>
- Kossek, E., & Ozeki, C. (1998). Work–family conflict, policies, and the job–life satisfaction relationship: A review and directions for organizational behavior–human resources research. *Journal of applied psychology*, 83(2), 139.

- Milner, R. J., & Echterling, L. G. (2021). Co-constructing meaning in the time of coronavirus. *Journal of Constructivist Psychology*, 34(3), 295–308. <https://doi-org.proxy-ub.rug.nl/10.1080/10720537.2020.1864691>
- Ostafin, B. D., Papenfuss, I., & Vervaeke, J. (2021). Fear of the unknown as a mechanism of the inverse relation between life meaning and psychological distress. *Anxiety, Stress & Coping: An International Journal*. <https://doi-org.proxy-ub.rug.nl/10.1080/10615806.2021.1994556>
- Petrou, P., & Bakker, A. B. (2016). Crafting one's leisure time in response to high job strain. *Human Relations*, 69(2), 507–529. <https://doi-org.proxy-ub.rug.nl/10.1177/0018726715590453>
- Petrou, P., Bakker, A. B., & den Heuvel, M. (2017). Weekly job crafting and leisure crafting: Implications for meaning-making and work engagement. *Journal of Occupational and Organizational Psychology*, 90(2), 129–152. <https://doi-org.proxy-ub.rug.nl/10.1111/joop.12160>
- Pöllänen, S., & Voutilainen, L. (2018). Crafting well-being: Meanings and intentions of stay-at-home mothers' craft-based leisure activity. *Leisure Sciences*, 40(6), 617–633. <https://doi-org.proxy-ub.rug.nl/10.1080/01490400.2017.1325801>
- Rudolph, C. W., Katz, I. M., Lavigne, K. N., & Zacher, H. (2017). Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *Journal of Vocational Behavior*, 102, 112–138. <http://dx.doi.org/10.1016/j.jvb.2017.05.008>
- Sheldon, K. M., Elliot, A. J., Kim, Y., & Kasser, T. (2001). What is satisfying about satisfying events? Testing 10 candidate psychological needs. *Journal of Personality and Social Psychology*, 80(2), 325–339. <https://doi-org.proxy-ub.rug.nl/10.1037/0022-3514.80.2.325>
- Steger, M. F., Dik, B. J., Duffy, R. D. (2012). Measuring meaningful work. *Journal of Career Assessment*, 20(3), 322–337. <https://doi-org.proxy-ub.rug.nl/10.1177/1069072711436160>
- Tooby, J., & Cosmides, L. (1990). On the universality of human nature and the uniqueness of the individual: The role of genetics and adaptation. *Journal of Personality*, 58, 17– 67. <http://dx.doi.org/10.1111/j.1467-6494.1990.tb00907.x>
- Van den Broeck, A., Ferris, D. L., Chang, C.-H., & Rosen, C. C. (2016). A review of self-determination theory's basic psychological needs at work. *Journal of Management*, 42, 1195–1229. <http://dx.doi.org/10.1177/0149206316632058>

Zhang, S., Shi, R., Liu, X., & Miao, D. (2014). Passion for a leisure activity, presence of meaning, and search for meaning: The mediating role of emotion. *Social Indicators Research*, 115(3), 1123–1135. <https://doi-org.proxy-ub.rug.nl/10.1007/s11205-013-0260-8>

Appendix A

Leisure Crafting scale from Petrou & Bakker (2016)

Table 1. The leisure crafting items and their respective factor loadings (N = 207).

Item	Loading
I try to build relationships through leisure activities.	.64
I try to find challenging activities outside of work.	.75
I try to increase my skills through leisure activities.	.81
I try to increase my learning experiences through leisure activities.	.82
I try to set myself new goals to achieve through leisure activities.	.74
Through my leisure activities, I look for inspiration from others.	.78
Through my leisure activities, I try to obtain novel experiences.	.73
My leisure time is a chance for me to grow and develop.	.75
I look for new experiences through leisure activities to keep myself mentally stimulated.	.74

Work as Meaning Inventori (WAMI) from Steger et al. (2012)

Subscale	Item	Loading on Subscale
Positive meaning	1. I have found a meaningful career.	.92
	4. I understand how my work contributes to my life's meaning	.60
	5. I have a good sense of what makes my job meaningful.	.82
	8. I have discovered work that has a satisfying purpose.	.87
Meaning making through work	2. I view my work as contributing to my personal growth	.70
	7. My work helps me better understand myself.	.82
	9. My work helps me make sense of the world around me.	.86
Greater good motivations	3. My work really makes no difference to the world. (R)	.60
	6. I know my work makes a positive difference in the world.	.80
	10. The work I do serves a greater purpose.	.88

Note. All factor loadings are taken from first random half of the sample.

Needs satisfaction scale from Sheldon et al. (2001)

Study 1: Need-Satisfaction Items With Factor Loadings Greater Than .45

Item (responses to "During this event I felt . . .")	Factor					
	1	2	3	4	5	6
1. Autonomy						
That my choices were based on my true interests and values.	.66					
Free to do things my own way.	.64					
That my choices expressed my "true self."	.72					
2. Competence						
That I was successfully completing difficult tasks and projects.		.86				
That I was taking on and mastering hard challenges.		.82				
Very capable in what I did.		.49				
3. Relatedness						
A sense of contact with people who care for me, and whom I care for.			.80			
Close and connected with other people who are important to me.			.85			
A strong sense of intimacy with the people I spent time with.			.77			