

# Cultural leisure activities, recovery and work engagement among hospital employees

Katinka TUISKU<sup>1\*</sup>, Marianna VIRTANEN<sup>2</sup>, Jessica DE BLOOM<sup>3</sup> and Ulla KINNUNEN<sup>3</sup>

<sup>1</sup>Department of Psychiatry, University of Helsinki and Helsinki University Central Hospital, Finland

<sup>2</sup>Finnish Institute of Occupational Health, Unit of Expertise for Work & Organizations, Finland

<sup>3</sup>School of Social Sciences and Humanities, Psychology, University of Tampere, Finland

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**Abstract:** This study explored the relationship between cultural leisure activities, recovery experiences and two outcomes among hospital workers. The differences in recovery experiences (detachment, relaxation, mastery and control) and outcomes (work engagement and subjective recovery state) among hospital personnel (N=769) were analysed by the type (receptive or creative) and frequency of cultural activities. The cross-sectional data were collected by a digital questionnaire. Employees who reported both receptive and creative cultural leisure activities on a weekly basis had the highest relaxation, mastery and control experiences during off-job time. In addition, those with weekly creative activities had beneficial mastery experiences. There were no differences in recovery outcomes after adjustment for age, except in work engagement. Cultural leisure activities, and creative activities in particular, play an important role in certain aspects of recovery.

**Key words:** Arts, Cultural activity, Health promotion, Hospital employees, Leisure, Occupational well-being, Recovery, Work engagement.

## Introduction

In today's stressful working conditions, the importance of recovery for employee well-being and productivity is greater than ever (e.g.<sup>1–3</sup>). Recovery from work is defined as the process that restores an individual's energy and mental resources<sup>4</sup>. In the health care sector, the restoration of resources, such as maintaining a positive motivational state, is important for coping with fast-developing technology; achieving higher goals with limited resources; and working under time pressure, increasing competition and interactional client demands<sup>5–8</sup>. Without optimal energetic and mental resources, these challenges may lead to emotional and cognitive overload, which is harmful for employee well-being in both the short and long term.

Strong psychological demands may have an adverse effect on the life quality of nurses by increasing psychological morbidity<sup>9</sup>). In the present study, we examined the role of cultural leisure time activities in the work stress recovery of hospital employees.

### *Recovery from the perspective of processes and outcomes*

The present study approached recovery from work from a process perspective<sup>2</sup>), according to which the mechanisms assumed to underlie the recovery phenomenon are the main focus. These mechanisms can be divided into two categories: 1) recovering activities and 2) experiences associated with these activities. Of the potentially recovering activities, we examined cultural activities, which have thus far received only limited research attention. We distinguished between receptive and creative cultural activities. Whereas receptive cultural activities are assumed to relieve stress by directing people's attention away from their daily stressors at work and/or at home, creative cultural activities may

\*To whom correspondence should be addressed.

E-mail: katinka.tuisku@hus.fi

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help employees build new resources, skills and a sense of accomplishment. These two complementary processes resemble the two assumed mechanisms of recovery: relief from job stress (passive mechanism) and the creation of new resources (active mechanism; for theoretical underpinnings, see for example<sup>10–12</sup>). We adopted this distinction with regard to cultural activities with the aim of gaining new insights into the role of cultural experiences and the underlying recovery mechanisms.

Recovery experiences are strategies through which individuals restore their energy resources and maintain well-being despite stressful situations<sup>13</sup>. Sonnentag and Fritz<sup>13</sup> have argued that it is not only the activities themselves, but also the psychological experiences associated with the activities that are relevant for recovery. They distinguish four recovery experiences: psychological detachment, relaxation, mastery, and control of leisure time. Psychological detachment implies disengaging mentally from work during off-job time. Relaxation is a state characterized by low sympathetic activation and increased positive affect. Mastery experiences refer to off-job processes associated with facing new challenges and learning. Control applied to leisure time refers to self-determination in deciding how to spend one's free time.

These recovery experiences have shown to be beneficial to recovery and well-being. For instance, psychological detachment seems to protect against exhaustion and health impairment (see<sup>3</sup>), and is also considered a prerequisite for relaxation<sup>14</sup>. Relaxation reduces tension and fosters the regeneration of mental and physical resources<sup>11</sup>. Mastery experiences may require further efforts, but they also build new inner resources such as self-efficacy and positive mood<sup>13, 14</sup>. Immersion into an activity that requires effort and skills tends to increase psychological capital and growth<sup>15</sup>. The positive emotions evoked by mastery and relaxation may counteract negative ones<sup>14</sup> and affect a person's mode of thinking allowing more creative, fresh, broad-minded, constructive, and integrative ways of processing<sup>15</sup>. Control over one's free time activities can be viewed as a basic human need<sup>16</sup> and fulfilment of this need during free time has been shown to relate to well-being (e.g.<sup>17, 18</sup>).

Recovery can also be viewed from the outcome perspective<sup>2</sup>. This perspective focuses on recovery as the result of a successful or less successful recovery process. Three types of recovery outcomes have been identified: psychological, physiological and behavioural. Of these, we focused on positive psychological outcomes and studied work engagement. Work engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigor,

dedication, and absorption<sup>19, 20</sup>. Vigor refers to high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence in the face of difficulties. Dedication is perceived as a sense of significance, enthusiasm, inspiration, pride, and challenge at work. Absorption is characterized by being fully concentrated on and happily engrossed in one's work, whereby time passes quickly and one has difficulties in detaching oneself from work. In addition, we used the employees' direct evaluation of their recovery state as an outcome, as some earlier Finnish studies have succeeded in doing<sup>7, 14</sup>.

#### *Cultural activities, recovery processes and outcomes*

Studies focusing on the role of cultural activities from a work recovery perspective are scarce. However, there is some evidence of an association between the frequency of cultural activity and mental well-being, suggesting a dose-response pattern<sup>21–24</sup>. Being involved in cultural activities at least weekly was associated with work engagement among health care professionals<sup>23</sup>. Creative leisure activities, referring to art-making, or creative self-expression, were associated with creativeness at work and a sense of personal achievement, whereas participating in cultural events, or consuming culture, were associated with work engagement<sup>23</sup>. Emergency employees with highly stressful jobs seemed to benefit from a broad range of cultural leisure activities in their private lives, which offered them better ways of coping with occupational stress<sup>25</sup>. Regular participation in cultural activities has been associated with good health, life satisfaction and lower levels of anxiety and depression<sup>22</sup>.

In terms of recovery experiences, psychological detachment and relaxation are thought to play a role in recovery through cultural activities<sup>23, 26</sup>. As far as we know, mastery and control have not been examined in relation to cultural activities. Nevertheless, we may expect mastery to be associated with creative activity (i.e. being active in the process), through learning new skills and facing new challenges.

#### *Study aims and hypotheses*

We examined the association between cultural leisure activities, recovery experiences and outcomes among hospital employees. We hypothesized that cultural leisure activities would be positively associated with recovery experiences (detachment, relaxation, mastery, control) and recovery outcomes (work engagement, evaluation of one's recovery state). More specifically, we expected that the active mechanism (i.e. creative cultural activities) would be more beneficial in this regard than the passive mechanism (i.e. receptive cultural activities).

## Subjects and Methods

### Subjects

The study sample (N=769) consisted of hospital personnel of the Medical Unit at Helsinki University Hospital. An anonymous digital questionnaire was sent to all email addresses included in the personnel register. The response rate was 35% (i.e. 769 respondents out of 2217). The mean age of the respondents was 45 (range 20–67 years). The majority of the respondents were female (92%), nurses (70%) and worked in permanent employment (89%). This reflected the overall structure of the personnel. The rest of the respondents were physicians (10%), special workers (7%), and secretaries (12%) or belonged to another professions (1%). Employees working in shifts (49%) and during day-time (51%) were almost equally represented among the respondents. For most of the respondents, the length of employment with their current employer was over two years (80%).

### Independent variables

Two types of self-reported *cultural leisure activities* were examined: 1) receptive, defined as ‘passive’ consumption of culture, or attending cultural events in the role of an audience or spectator and 2) creative activities, defined as ‘active’ art-making or creative expression. The frequency of both types of cultural activities was measured by single questions (“How often do you engage in creative/receptive leisure activities?”) Examples of target creative activities were writing, musical expression or composing, producing visual arts, acting, and dancing. Examples of target receptive cultural activities included reading; listening to music; watching theatre, movies or dance performances; and visiting art exhibitions. The answers were given on a scale from 1 to 6: 1=never, 2=occasionally, 3=monthly, 4=weekly, 5=several times a week, and 6=daily. For the analyses, the variables were dichotomized to high (at least weekly) versus low (less than weekly) activity categories, because in earlier studies the weekly frequency of cultural activity has discriminated between outcomes (see<sup>23, 24, 27</sup>).

### Dependent variables

*Recovery experiences* were measured by the Recovery Experience Questionnaire, REQ<sup>13</sup>, which has been validated in Finland<sup>14</sup>. It consists of 16 items, of which four measure each of the following experiences: psychological detachment (e.g. “I don’t think about work at all”), relaxation (e.g. “I do relaxing things”), mastery (e.g. “I do things that challenge me”) and control (e.g. “I myself determine how I will spend my time”). The participants were asked to

respond to the items with respect to their off-job time using a five-point scale ranging from 1 (totally agree) to 5 (totally disagree). The Cronbach alphas showing the internal consistency of the measures were high: .85 for detachment, .82 for relaxation, .84, for mastery and .85 for control.

Of *recovery outcomes*, work engagement was measured by the UWES-9, the shortened form of the Utrecht Work Engagement Scale<sup>20, 28</sup>, which consists of three subscales. Each scale includes three items: e.g., “At work, I feel I am bursting with energy” (vigor), “I am enthusiastic about my work” (dedication), and “I get carried away when I am working” (absorption). The items were rated on a seven-point scale ranging from 0 (never) to 6 (daily). For an overall total score, the scores of the subscales were averaged. The Cronbach alpha for this total scale was 0.93. Subjective recovery state was elicited by a single question “How well do you generally feel you recover from the strain caused by your job after your working day?” The response scale ranged from 1 (very poorly) to 5 (very well). This question has turned out to be a valid indicator of a person’s recovery state<sup>14</sup>.

### Data analyses

First, we categorized the employees into four groups on the basis of the two types of cultural activities: 1) group with no cultural activities, 2) receptive group (passive), 3) creative group (active), and 4) group with both receptive and creative cultural activities. We then examined differences between the groups using analysis of variance (ANOVA), covariance (ANCOVA), and Chi square tests. In addition, Spearman correlations were calculated for the study variables. Statistical analyses were performed by the SPSS program.

The study was approved by the Ethics Committee of the Finnish Institute of Occupational Health on 2 March 2012, and study permission was granted by the leader of the Helsinki University Central Hospital Medical Unit on 10 February 2012.

## Results

### Descriptive results

Two thirds of the participants reported engaging in cultural activities at least weekly. Engaging in only receptive cultural activities was more common (34%) than engaging in only creative cultural activities (9%) weekly. Approximately a fifth of the subjects (22%) pursued both types of cultural activities weekly, and 35% did not engage in any form of cultural activity on a weekly basis. The variables of receptive and creative cultural activities correlated significantly, but rather weakly so ( $\rho=0.280$ ,  $p<0.001$ ). The four

groups of cultural leisure activities were not significantly different with respect to either work-related or general background factors (see Table 1).

Of the recovery experiences, relaxation and control during free time were reported most often, i.e. 86% of the participants agreed either totally or partially with the items. Mastery (74%) and detachment (71%) were somewhat less common. On the basis of their mean scores, the frequency of the recovery experiences was about the same: control (M=3.96, SD=0.78), relaxation (M=3.86, SD=0.71), detachment (M=3.59, SD=0.84), and mastery (M=3.58, SD=0.76). The mean score for work engagement was 4.63 (SD=1.17), and daily experience of work engagement was reported by 19% of the respondents. Most of the employees (59%) reported a good recovery state, i.e. from quite well to well, whereas 30% reported a moderate recovery state,

and the rest (11%) reported that they recovered from work stress either poorly or quite poorly.

There were no differences between the background factors of the cultural activity groups (see Table 1). However, work shift and profession correlated with all recovery experiences except for mastery (Table 2). Employees working in shifts and nurses had slightly more beneficial recovery experiences. In addition, working in shifts correlated positively with positive subjective recovery state, and older age correlated with higher levels of mastery experiences and work engagement. However, these correlations were quite low (under 0.20).

The distribution of work engagement was slightly skewed (-1.312, SD of skewness 0.090), as expected on the basis of earlier studies<sup>23,28</sup>. The other variables (recovery experiences and subjective recovery state) were normally distributed.

**Table 1. Background variables according to type of cultural activity.**

|                                  | Cultural leisure activities on weekly basis |                           |                          |  | F-test/ Chi <sup>2</sup> |
|----------------------------------|---|---------------------------|--------------------------|--|--------------------------|
|                                  | Neither receptive nor creative activities   | Only receptive activities | Only creative activities | Both receptive and creative activities |                          |
| Number of employees, n (%)       | 296 (35)                                    | 256 (34)                  | 65 (9)                   | 169 (22)                               |                          |
| Mean age (SD)                    | 45.6 (10.6)                                 | 43.4 (11.5)               | 45.5 (11.0)              | 45.8 (10.6)                            | 2.43                     |
| Females, %                       | 93  | 91                        | 95                       | 91                                     | 3.95                     |
| Daytime work shifts, %           | 49  | 52                        | 48                       | 51                                     | 0.73                     |
| Permanent employment, %          | 90  | 86                        | 89                       | 89                                     | 2.51                     |
| Length of employment >2 years, % | 79  | 75                        | 85                       | 86                                     | 2.20                     |
| Profession Nurses, %             | 70  | 68                        | 71                       | 70                                     | 0.51                     |

All p-values were non-significant, >0.05

**Table 2. Spearman correlations between background characteristics, recovery experiences and outcomes**

|                            | Detachment | Relaxation | Mastery | Control | Work engagement | Subjective recovery state |
|----------------------------|------------|------------|---------|---------|-----------------|---------------------------|
| Gender                     |            |            |         |         |                 |                           |
| 1 female                   | .046       | .071       | .069    | .063    | .033            | .012                      |
| 2 male                     |            |            |         |         |                 |                           |
| Age in years               | .033       | .044       | .092*   | .044    | .189***         | .040                      |
| Work shift                 |            |            |         |         |                 |                           |
| 1 daytime                  | .076*      | .096**     | .016    | .105**  | .063            | .078*                     |
| 2 shift work               |            |            |         |         |                 |                           |
| Type of employment         |            |            |         |         |                 |                           |
| 1 permanent                | .026       | .052       | .046    | .041    | .003            | .039                      |
| 2 temporary                |            |            |         |         |                 |                           |
| Employment length in years | -.024      | -.055      | .008    | -.050   | .043            | .013                      |
| Profession                 |            |            |         |         |                 |                           |
| 1 nurses                   | -.108**    | -.104*     | .012    | -.116** | .054            | .023                      |
| 2 others                   |            |            |         |         |                 |                           |

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

*Comparisons between recovery experiences and outcomes of four cultural activity patterns*

The differences between the groups of cultural activities are presented in Table 3. We made the analyses first without controls, and after this controlled for the factors (work shift, profession and age) in which the groups differed and which showed correlations with the outcomes. The ANOVAs indicated that the recovery experiences of the four groups significantly differed in relaxation, mastery and control, but not in detachment. The subjective recovery state of the cultural activity groups did not differ from each other.

Post-hoc comparisons with Bonferroni showed that the group with both receptive and creative activities showed significantly higher scores in relaxation, mastery and control than the group without cultural activities on a weekly basis (Table 3). In addition, the group with both receptive and creative activities showed higher mastery scores than the group with only receptive activities. The group with only receptive activities, in turn, scored higher in relaxation than those without weekly cultural activities. The group with only creative activities had higher mastery scores than the groups with only receptive activity or neither receptive nor creative activity).

The performed ANCOVA analyses in which work shift, profession and age were set as covariates confirmed the differences between the groups. Thus adjustment for these background factors did not reduce the significance of inter-group differences (Table 3). However, differences in work engagement became significant when we compared the group that

took part in both weekly cultural activities with the group that did not take part in either of the weekly cultural activities. The most culturally active participants showed significantly higher work engagement than the most passive ones.

## Discussion

This study was designed to investigate the role of cultural activities in recovery from work stress. More specifically, we examined the link between receptive cultural activities (e.g., going to a concert or a theatre performance) and creative cultural activities (e.g., playing an instrument, writing) with regard to recovery experiences (i.e., detachment, relaxation, mastery control), subjective recovery state and work engagement.

Cultural leisure activities were common in this female-dominated sample that consisted mainly of nurses. Only one third of the employees reported engagement in cultural activities less often than weekly, and even one fifth of them reported taking part in both receptive and creative activities on a weekly basis. In line with our hypothesis, the frequency and type of cultural leisure activities were positively associated with three out of four recovery experiences: employees who participated at least weekly in cultural –both receptive and creative– activities had more beneficial relaxation, mastery and control experiences during off-job time compared to those who did not take part in these two types of cultural activities. In addition, those who took part in only creative activities seemed to have more mas-

**Table 3. Differences in recovery experiences and outcomes between four groups of cultural leisure activities by ANOVA and ANCOVA.**

|                            | 1. Neither<br>receptive nor<br>creative<br>(n=296) | 2. Only<br>receptive<br>(n=256) | 3. Only<br>creative<br>(n=65) | 4. Both<br>receptive<br>and creative<br>(n=169) | Anova<br>F                                     | Ancova<br>F     |
|----------------------------|--|---------------------------------|-------------------------------|---|--|-----------------|
| Weekly cultural activities | Mean (SD)  | Mean (SD)                       | Mean (SD)                     | Mean (SD)                                       |  |                 |
| Detachment                 | 3.58 (0.83)  | 3.58 (0.85)                     | 3.69 (0.78)                   | 3.62 (0.88)                                     | 0.38   | 1.77            |
| Relaxation                 | 3.74 (0.81)  | 3.91 (0.62)                     | 3.90 (0.73)                   | 4.00 (0.65)                                     | 4.32**   | 4.20**          |
| Mastery                    | 3.43 (0.81)  | 3.49 (0.72)                     | 3.77 (0.69)                   | 3.87 (0.69)                                     | 4, 2 > 1*<br>14.3***<br>4 > 1, 2***<br>3 > 1** | 10.5***         |
| Control                    | 3.86 (0.86)  | 4.01 (0.72)                     | 3.86 (0.81)                   | 4.09 (0.70)                                     | 3.67*<br>4 > 1*                                | 3.86*           |
| Work engagement            | 4.53 (1.24)  | 4.61 (1.11)                     | 4.79 (0.97)                   | 4.72 (1.22)                                     | 1.35   | 4.65*<br>4 > 1* |
| Subjective recovery state  | 3.59 (0.95)  | 3.68 (0.85)                     | 3.58 (0.93)                   | 3.74 (1.05)                                     | 1.03   | 1.62            |

Notes: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . ANCOVAs adjusted for work shift, profession and age. Pairwise comparisons with Bonferroni. Mean scores and standard deviations reported in parentheses.

tery experiences than those who partook in receptive activities or those who did not take part in any cultural activities. These results match earlier research findings which have demonstrated that creative activities during free time facilitate recovery, job creativity and in-role behaviour<sup>29)</sup>.

Theoretically, our findings cautiously suggest that the active mechanism may be more powerful in enabling people to recover from stressful work than the passive mechanism. It seems that actively engaging in effortful activities that demand a person's attention mentally and/or physically, and which are perceived as enjoyable promote recovery more effectively than engaging in activities in which the person is a mere passive observer. This supposition accords with studies showing that physical exercise constitutes a highly beneficial leisure activity to foster recovery from work (e.g.<sup>30,31)</sup>). In relation to relaxation, however, receptive activities seemed to play a key role: relaxation was highest among those who took part in both receptive and creative or only receptive cultural activities. It seems that consuming culture and pursuing creative activities are associated to some extent with different recovery profiles; the former with relaxation and the latter with mastery experiences during off-job time. A study by Tay and Diener<sup>32)</sup> showed similar patterns: fulfilment of basic needs and relief from demands (as evident in detachment, relaxation) was primarily tied to a decrease of negative emotions, whereas fulfilment of higher order needs was tied to an increase of positive emotions.

Contrary to our hypothesis, there were few significant differences between the recovery outcomes of the four cultural activity patterns, i.e. work engagement and subjective recovery state. Only in work engagement was there a significant group difference after adjustment for age. People who regularly engaged in both receptive and creative activities reported higher levels of work engagement than people who did not engage in cultural activities. Subjective recovery state was elicited by a single question with five response options. It is possible that this measure was too approximate to detect differences.

The previously reported association between mastery and work engagement<sup>33)</sup> was also evident in this study sample (Spearman  $\rho=0.330$ ,  $p<0.001$ ). This study also found an association between creative cultural activities and work engagement when background factors were taken into account in the analyses. In a study among Finnish health care professionals<sup>23)</sup> creative leisure activities were associated with a creative working mode, but not with work engagement. It is likely that work engagement is better explained by work-related than leisure-related factors. Participating in employer-provided cultural events

together with colleagues was, however, associated with work engagement<sup>34)</sup>.

A previous longitudinal study among Finnish employees identified different patterns of recovery experiences with specific outcomes<sup>33)</sup>. The most common pattern was reasonably high, stable levels of all four types of recovery experience (detachment, relaxation, mastery and control) during the follow-up. Employees with this pattern also seemed to be protected from stress-related negative effects such as burnout and sleep problems. Those with experiences of high levels of mastery and control during off-job time reported the highest levels of work engagement. Correspondingly, among those employees with decreasing levels of all recovery experiences, job exhaustion increased across time.

The average level of subjective recovery state reported here was similar to the score reported by educational sector-, business- and service employees in a previous Finnish study<sup>35)</sup>, but lower than that reported by information technology workers; a result which may be related to their younger age and different life situation. In our study, moderate-to-poor recovery was reported by 41% of hospital employees, whereas the previous Finnish study among different sectors of working life reported moderate-to-poor recovery among 27–47%. Poor recovery seemed to predict exhaustion and cynicism after one year<sup>35)</sup>.

Contrary to our hypothesis, psychological detachment, which has been considered the most effective recovery mechanism<sup>3)</sup>, was the only recovery experience that was not associated with cultural leisure activities in this study. In our sample, mastery was most strongly associated with cultural leisure activities among hospital personnel. Although it may be expected that recovery experiences of mastery are typical of creative art activities, this is not self-evident. Creative activities may also involve negative experiences such as frustration and failure. Clinical observations of single cases have shown even burnout to be related to an artistic hobby. However, whenever present, the rewarding feelings of mastery, personal accomplishment, self-realization and finding meaningfulness probably play a central role in recovery through art-making.

Receptive cultural activities were associated with relaxation, which could also be expected. Aesthetic experiences when consuming culture may however be far more than relaxing and satisfying. Instead, they may be stimulating, inspiring, challenging, contradictory and startling, leading to new ideas or reorganizations of thoughts and values.

Earlier studies suggested that among males, receptive cultural activities are associated with better health outcomes than creative activities, whereas among females, this

seems to be vice versa<sup>22</sup>). The more favourable outcomes of creative leisure, when compared to the receptive activities found in this study, may be partially explained by the overrepresentation of females in our study sample. Respectively, the central role of mastery in associations between cultural activities and recovery experiences may be partially explained by gender differences and age, although they did not significantly correlate with mastery in this sample.

The mechanisms of recovery that people use are related to personal and situational factors. Earlier studies found that psychological detachment from work is generally easier for males and younger people, and that mastery experiences are more common among older employees<sup>35</sup>). Psychological detachment, relaxation and control of leisure are more difficult to achieve for employees with long working hours<sup>35</sup>). Therefore, mastery may constitute the most easily available recovery mechanism in our sample, which consisted mainly of nurses.

Through participation in leisure activities, people build social relationships, feel positive emotions, and acquire additional skills and knowledge, which help them maintain well-being and improve their quality of life<sup>36</sup>). The well-being effects of collective cultural activities may be at least partially mediated by building social capital<sup>37</sup>). In addition, organizational social capital (bonding, bridging, and linking) is positively associated with employee health and negatively associated with emotional exhaustion, which in turn increases the risk of absenteeism and lowered work performance<sup>38</sup>). Positive mental health approaches are needed at workplaces to protect employees from the adverse psychological effects of stress<sup>39</sup>). Providing opportunities to actively engage in cultural activities may present one opportunity for employers to achieve this aim among their workforce.

The well-being mechanisms of cultural activities, suggested by qualitative studies, include distraction from life-situation stressors and mental recovery processes leading to positive effects on mood, self-esteem and self-belief<sup>40</sup>). Besides refreshing, inspiring, stimulating and relaxing effects, personal development and coping with stress may also relate to cultural activities<sup>26</sup>). Possible positive psychological mechanisms<sup>41</sup>) behind well-being effects may include the strengthening and expression of positive affects by aesthetic enjoyment, and psychological growth through inspiration and immersion in a creative process or cultural experience. Expressive art activities can increase health in all domains, and enhance creativity, motivation and stimulation<sup>42</sup>). Brajsa-Zganec *et al.*<sup>36</sup>) suggest that cultural leisure activities play an important role in well-being because they provide opportunities to satisfy personal needs (e.g. relat-

edness, competence), to find meaningfulness, and to contemplate one's life values.

The dichotomous distinction between receptive and creative activity<sup>22</sup>) may be challenged by an overlap between the two types of leisure activity groups. We considered this in our statistical comparison by dividing the weekly cultural activity patterns into four non-overlapping groups: Only receptive (34% of participants), only creative (9%), both receptive and creative (22%) and neither (35%). Consuming culture is common in the Finnish population<sup>43</sup>), receptive cultural experiences are widely available, and enjoying arts is possible without any art-making skills or equipment. In contrast, creative activity requires more techniques and ideas. Creative activity is more often accompanied by receptive activity than vice versa. In our study, most (71%) of those who partook weekly in creative activity also reported receptive activity, whereas creative activity was less common (37%) among those with receptive activity.

A variety of receptive aesthetic experiences are involved in the processes of learning and art-making. Producing and experiencing art occurs simultaneously in performing arts and music. Moreover, similar brain activity patterns have been detected in music making and listening<sup>44</sup>). An art experience involves complex brain activation and psychological well-being effects<sup>37, 44</sup>). A creative process, whether art-making or daily problem solving, is not merely active doing, but a mode of being, and perceiving in a state of conscious awareness is essential for divergent thinking<sup>45</sup>). Therefore, receptive cultural activity cannot be considered "passive"; instead it represents powerful and activating art experiences. The receptive and cultural quality of art activities could alternatively be conceived as dimensional rather than dichotomous concepts.

#### *Limitations of the study*

A cross-sectional study setting does not allow causal conclusions, thus the evidence on the investigated relations remains tentative. In addition, the response rate was relatively low (35%), questioning the general applicability of the results and lowering the power of analysis and conclusions. However, the characteristics of the study participants were comparable to the general personnel structure of a hospital, suggesting a minimal selection bias. The low response rate can relate to lack of time and a high information flow in hospital work. Better timing of a similar questionnaire, outside of daily routines, seemed to yield a better response rate (64%)<sup>23</sup>) and should be considered in future research.

We can expect some selection of respondents in favour of those who have a personal interest in occupational well-

being issues in general, or due to their own personal experiences that they want to share. Both positive and negative well-being experiences and opinions regarding cultural activity seem to elicit responses and become expressed among hospital employees<sup>26</sup>.

We can also expect selection of participants in favour of culturally more active. There were, however, no significant differences between the background factors of the culturally active and non-active employees. Besides, the proportions of culturally active employees in this study were not particularly high when compared to those studies with a better response rate<sup>23</sup>: At least weekly receptive cultural activities were reported by 54% of the sample in our study versus 79% in an earlier study, and at least weekly creative activities were reported by 30% in this study compared to 41% in an earlier study. Despite the minor selection of the participants, all the subgroups in the comparison were sufficiently represented.

However, depending on the non-respondent groups, under- or overestimation of the effects are possible. This should be addressed in any future replication of the present study. Our sample of hospital employees was rather specific (e.g. mostly female nurses), limiting the generalizability of the results to the general working population. Nursing jobs are emotionally taxing, and cultural activity during leisure may then be of greater importance for this group than for workers in many other sectors in the labour market<sup>46</sup>.

### Conclusions

Cultural leisure activities, creative activities in particular, were associated with beneficial recovery experiences and work engagement. Creative cultural activities were strongly related to mastery experiences during leisure time. Our study suggests that engagement in cultural activities during leisure time can be beneficial for hospital employees' recovery from stressful work. Future research is needed to identify the characteristics of working people who partake in or refrain from engagement in cultural activities, and to investigate how engagement in creative activities in particular can be stimulated.

### References

- 1) Siltaloppi M, Kinnunen U, Feldt T (2009) Recovery experiences as moderators between psychosocial work characteristics and occupational well-being. *Work Stress* **23**, 330–48. [[CrossRef](#)]
- 2) Sonnentag S, Geurts SAE (2009) Methodological issues in recovery research. In: *Current perspectives on job-stress recovery*, Sonnentag S, Perrewé P, Ganster D (Eds.), 1–36, Emerald, Bingley.
- 3) Sonnentag S, Fritz C (2015) Recovery from job stress: The stressor-detachment model as an integrative framework. *J Organ Behav* **36**, 72–103. [[CrossRef](#)]
- 4) Zijlstra FRH, Sonnentag S (2006) After work is done: Psychological perspectives on recovery from work. *Eur J Work Organ Psychol* **15**, 129–38. [[CrossRef](#)]
- 5) Aiken LH, Clarke SP, Sloane DM (2002) Hospital staffing, organization, and quality of care: cross-national findings. *Int J Qual Health Care* **14**, 5–13. [[Medline](#)] [[CrossRef](#)]
- 6) McNeely E (2005) The consequences of job stress for nurses' health: time for a check-up. *Nurs Outlook* **53**, 291–9. [[Medline](#)] [[CrossRef](#)]
- 7) Kauppinen T, Hanhela R, Kandolin I, Karjalainen A, Kasvio A, Perkiö-Mäkelä M, Priha E, Toikkanen J, Viluksela M (2010) *Work and health in Finland 2009*. Institute of Occupational Health, Helsinki.
- 8) Zeller JM, Levin PF (2013) Mindfulness interventions to reduce stress among nursing personnel: an occupational health perspective. *Workplace Health Saf* **61**, 85–9, quiz 90. [[Medline](#)]
- 9) Tzeng DS, Chung WC, Yang CY (2013) The effect of job strain on psychological morbidity and quality of life in military hospital nurses in Taiwan: a follow-up study. *Ind Health* **51**, 443–51. [[Medline](#)] [[CrossRef](#)]
- 10) Geurts SAE, Sonnentag S (2006) Recovery as an explanatory mechanism in the relation between acute stress reactions and chronic health impairment. *Scand J Work Environ Health* **32**, 482–92. [[Medline](#)] [[CrossRef](#)]
- 11) Marzuq N, Drach-Zahavy A (2012) Recovery during a short period of respite: The interactive roles of mindfulness and respite experiences. *Work Stress* **26**, 175–94. [[CrossRef](#)]
- 12) De Bloom J, Geurts S, Kompier M (2010) Vacation from work as prototypical recovery opportunity. *Gedrag Organ* **23**, 333–49.
- 13) Sonnentag S, Fritz C (2007) The Recovery Experience Questionnaire: development and validation of a measure for assessing recuperation and unwinding from work. *J Occup Health Psychol* **12**, 204–21. [[Medline](#)] [[CrossRef](#)]
- 14) Kinnunen U, Feldt M, Siltaloppi M, Sonnentag S (2011) Job demands-resources model in the context of recovery: Testing recovery experiences as mediators. *Eur J Work Organ Psychol* **20**, 805–32. [[CrossRef](#)]
- 15) Seligman MEP, Csikszentmihalyi M (2000) Positive psychology. An introduction. *Am Psychol* **55**, 5–14. [[Medline](#)] [[CrossRef](#)]
- 16) Ryan RM, Deci EL (2000) Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am Psychol* **55**, 68–78. [[Medline](#)] [[CrossRef](#)]
- 17) De Bloom J, Geurts SAE, Kompier MAJ (2013) Vacation (after-) effects on employee health and well-being, and the role of vacation activities, experiences and sleep. *J Happiness Stud* **14**, 613–33. [[CrossRef](#)]
- 18) Ryan RM, Bernstein JH, Brown KW (2010) Weekends, work, and well-being: Psychological need satisfactions



- and day of the week effects on mood, vitality, and physical symptoms. *J Soc Clin Psychol* **29**, 95–122. [CrossRef]
- 19) Schaufeli WB, Salanova M, González-Romá V, Bakker AB (2002) The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *J Happiness Stud* **3**, 71–92. [CrossRef]
  - 20) Schaufeli WB, Bakker AB, Salanova M (2006) The measurement of work engagement with a short questionnaire: A cross-national study. *Educ Psychol Meas* **66**, 701–16. [CrossRef]
  - 21) Theorell T, Osika W, Leineweber C, Magnusson Hanson LL, Bojner Horwitz E, Westerlund H (2013) Is cultural activity at work related to mental health in employees? *Int Arch Occup Environ Health* **86**, 281–8. [Medline] [CrossRef]
  - 22) Cuyppers K, Krokstad S, Holmen TL, Skjei Knudtsen M, Bygren LO, Holmen J (2012) Patterns of receptive and creative cultural activities and their association with perceived health, anxiety, depression and satisfaction with life among adults: the HUNT study, Norway. *J Epidemiol Community Health* **66**, 698–703. [Medline] [CrossRef]
  - 23) Tuisku K, Pulkki-Råback L, Ahola K, Hakanen J, Virtanen M (2012) Cultural leisure activities and well-being at work: A study among health-care professionals. *J Appl Arts Health* **2**, 273–87. [CrossRef]
  - 24) Bygren LO, Weissglas G, Wikström BM, Konlaan BB, Grjibovski A, Karlsson AB, Andersson SO, Sjöström M (2009) Cultural participation and health: a randomized controlled trial among medical care staff. *Psychosom Med* **71**, 469–73. [Medline] [CrossRef]
  - 25) Iwasaki Y, Mannell RC, Smale BJ, Butcher J (2005) Contributions of leisure participation in predicting stress coping and health among police and emergency response services workers. *J Health Psychol* **10**, 79–99. [Medline] [CrossRef]
  - 26) Tuisku K, Houni P (2015) Experiences of cultural activities provided by the employer in Finland. *Nordic J Working life studies* **5**, 115–31. [CrossRef]
  - 27) Väänänen A, Murray M, Koskinen A, Vahtera J, Kouvonen A, Kivimäki M (2009) Engagement in cultural activities and cause-specific mortality: prospective cohort study. *Prev Med* **49**, 142–7. [Medline] [CrossRef]
  - 28) Hakanen J (2009) Assessment Method for Work Engagement, Utrecht Work Engagement Scale. Työterveyslaitos, Helsinki.
  - 29) Eschleman KJ, Madsen J, Alarcon G, Barelka A (2014) Benefiting from creative activity: The positive relationships between creative activity, recovery experiences, and performance-related outcomes. *J Occup Organ Psychol* **87**, 579–98. [CrossRef]
  - 30) Blasche GW, Arlinghaus A, Dorner TE (2014) Leisure opportunities and fatigue in employees: A large cross-sectional study. *Leis Sci* **36**, 235–50. [CrossRef]
  - 31) Feuerhahn N, Sonnentag S, Woll A (2014) Exercise after work, psychological mediators, and affect: A day-level study. *Eur J Work Organ Psychol* **23**, 62–79. [CrossRef]
  - 32) Tay L, Diener E (2011) Needs and subjective well-being around the world. *J Pers Soc Psychol* **101**, 354–65. [Medline] [CrossRef]
  - 33) Siltaloppi M, Kinnunen U, Feldt T, Tolvanen A (2011) Identifying patterns of recovery experiences and their links to psychological outcomes across one year. *Int Arch Occup Environ Health* **84**, 877–88. [Medline] [CrossRef]
  - 34) Tuisku K, Pulkki-Råback L, Virtanen M (2015) Occupational wellbeing is associated to cultural activity: A cross-sectional study among hospital nurses. In press. WORK, 2016.
  - 35) Kinnunen U, Feldt T (2009) Recovery from work from a psychological perspective. In: *Psychology of recovery from work*, Kinnunen U, Mauno S (Eds), 7–27(in Finnish). University Press, Tampere.
  - 36) Brajša-Žganec A, Merkaš M, Šverko I (2011) Quality of Life and Leisure Activities: How do Leisure Activities Contribute to Subjective Well-Being? *Soc Indic Res* **102**, 81–91. [CrossRef]
  - 37) Hyypä MT (2014) Cultural activity prolongs life. *Kulttuuripidentää ikää* (in Finnish). Duodecim, Helsinki.
  - 38) van Scheppingen AR, de Vroome EM, ten Have KC, Bos EH, Zwetsloot GI, van Mechelen W (2013) The associations between organizational social capital, perceived health, and employees' performance in two Dutch companies. *J Occup Environ Med* **55**, 371–7. [Medline] [CrossRef]
  - 39) Page KM, Milner AJ, Martin A, Turrell G, Giles-Corti B, LaMontagne AD (2014) Workplace stress: what is the role of positive mental health? *J Occup Environ Med* **56**, 814–9. [Medline] [CrossRef]
  - 40) Clift S, Hancox G, Morrison I, Hess B, Kreutz G, Stewart D (2010) Choral singing and psychological wellbeing: Quantitative and qualitative findings from English choirs in a cross-national survey. *J Appl Arts Health* **1**, 19–34. [CrossRef]
  - 41) Seligman M (2002) *Authentic happiness: using the new positive psychology to realize your potential for lasting fulfillment*. Simon & Schuster, New York.
  - 42) Martin AS, Harmell AL, Mausbach BT (2015) Positive psychological traits. In: *Positive psychiatry: A clinical handbook*, Jeste DV, Palmer BW (Eds), 19–43. American Psychiatric Publishing, Arlington. [CrossRef]
  - 43) Statistics Finland 2014. Culture and media. Helsinki. [http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuuttelo/yklt\\_klt\\_201300\\_2014\\_10376\\_net.pdf](http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuuttelo/yklt_klt_201300_2014_10376_net.pdf), last accessed 8.11.2015
  - 44) Theorell T (2014) *Psychological health effects of musical experiences: Theories, studies and reflections in music health science*. Springer, London. [CrossRef]
  - 45) Penman D (2015). *Mindfulness for Creativity*. Piatkus, London.
  - 46) Wikström BM (2011) Works of art as a pedagogical tool: an alternative approach to education. *Creat Nurs* **17**, 187–94. [Medline] [CrossRef]