**METHODOLOGICAL NOTES**

The following methodological notes present supplemental information to our research study. This material can aid future researchers to design and implement collaborative research (Guerci et al., 2019). The information presented encompasses a consent form, the structure of the workshop component of the structured intervention, clarification of terminology used in the workshop, observation protocols, a data protocol, and suggestions for collaborative research. In the beginning of the structured intervention, we asked the participants to familiarise themselves with the nature of the collaboration and the workshop component of the intervention and sign the consent form. The first author explained the key stages of the intervention to the organisation and clarified core terminology. We utilised observation protocols in order to capture behavioural and cognitive processes during the workshop component of the structured intervention. The data protocol clarifies the type of data collected using surveys and interviews. We conclude with suggestions to other colleagues that are interested in conducting further research in this knowledge domain.

**1. Consent Form**

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**Title of project**

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**Subtitle where appropriate**

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**Name of principal researcher**

***Please initial***

• I confirm that I have been given and have read and understood the [ ]

information sheet for the above study and have asked and

received answers to any questions raised

• I understand that my participation is voluntary and that I am free to [ ]

withdraw at any time without giving a reason and without my rights

being affected in any way

• I understand that the researchers will hold all information and data [ ]

collected securely and in confidence and that all efforts will be made

to ensure that I cannot be identified as a participant in the study (except

as might be required by law) and I give permission for the researchers

to hold relevant personal data

• I agree to take part in the above study [ ]

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Name of subject Signature Date**

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\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Name of principal researcher Signature Date**

One copy for the subject; one copy for the researcher.

**2. Structure of the Workshop Component of the Structured Intervention**

**Professional and Personal Entry**

* Welcoming to the workshop and setting up the scene
* Creative warm-up exercises with participants
* Theoretical introduction into creativity and how it can be developed
* Explaining the process of creative problem solving and introducing the real problems to participants

Workshop

begins

Phase of Idea Collection

Analysis and formulating attributes of the problems

Phase of Idea Generation

Brainstorming ideas between attributes of the problems

Two-hour workshop

Brainstorming connections between ideas generated and the problems

Phase of Idea Consolidation

Phase of Idea Evaluation and Choice

Selection and development of best ideas in the form of solutions

Phase of Idea Elaboration

Refinement and presentation of solutions

Workshop

ends

Source: adapted from Brem (2019)

**3. Clarification of Terminology – Artefacts and Techniques Used in Workshop**

|  |  |
| --- | --- |
| **Terminology** | **Explanation** |
| Professional entry | One-hour technical presentation about the research, the workshop agenda and the CPS learning process. |
| Artefacts | A pair of dice, drawing circles of opportunities on flip charts, using markers to record ideas on flip charts, working with diaries post workshop. |
| The ‘Circle of Opportunity’ technique | The technique that encourages free association in CPS: defining 12 attributes of the problems, selection of two random attributes (with the use of a pair of die) and brainstorming connections between these two attributes and in consideration of the primary problem, choice of several primary ideas and finalising a creative solution. |
| Team-based experiential learning | In the workshop, employees are randomly assigned in teams of three or four participants and work together through CPS. |
| The facilitator | Author 1 runs the workshop and observes employees’ behaviours in the process of CPS. During the workshop, she interacts with employees and provides support and explanation about the task when needed. |

**4. Observation Protocol of Individual Workshop Behaviours – Section One**

|  |  |  |
| --- | --- | --- |
| **Stage** | **Resources** | **Behaviours and Activities** |
| Background Information | | |
| Observer | Date of Observation: | |
| Duration of Observation: | |
| Total Number of Attendees: | |
| Section One: Theoretical Part of the Workshop | | |
| This session involves a theoretical introduction to the problem of creativity (including definitions, the importance of creativity to any employee, thinking styles that are associated with creativity) and several warm-up exercises. | | |
| Purpose | The workshop facilitator prepares the participants for the practical section of the workshop which involves creative problem-solving to the organisational challenge. The workshop population should be able to understand the meaning of creativity and distinguish creativity-related thinking styles and behaviours. | |
| Resources | Print materials (hand-outs), hands-on materials (sheets of paper, pens, coins), technology/visual resources (computer, screen projector) | |
| Major Activities | Formal presentation by the facilitator | The presentation focused on the topic of creativity, the model of creativity and thinking styles |
| Warm-up exercises | 1. Involvement in discussion as a team:  2. Ability to consider and discuss creativity: |
| Additional activities:  1. Hands up if you feel like you are naturally creative  2. Keep your hand up or raise your hand if your organisation encourages you to be creative  3. Keep your hand up or raise your hand if you think that you are creative in your current job | Yes/No answer (hand up means ‘yes’ as an answer; hand down means ‘no’ as an answer)  Number of Yes/No:  1.  2.  3. |
|
|
| Comments: | | |

Source: adapted from Creswell (2003)

**5. Observation Protocol of Individual Workshop Behaviours – Section Two**

|  |  |  |
| --- | --- | --- |
| Section Two: Practical Part of the Workshop | | |
| This session involves a practical element of the workshop where the participants engage in creative problem-solving to an organisational problem. The creative problem-solving process is used to guide the participants throughout the stages of activity. | | |
| Purpose/Goal | The primary goal: to apply the knowledge and skills in creativity; learn by doing. There are a number of phases, for example, to develop a range of ideas in the process of brainstorming and to connect ideas with the workshop challenge, to use ideas from the workshop, and to generate creative solutions. | |
| Resources | Print materials (hand-outs of the presentation), the tools for creativity (a pair of die, flip charts, markers) | |
| Structuring Activities | Small groups (3-4 participants each) | |
| Major Activities | Ability to analyse formulate attributes of the problem | Behavioural processes:  Creativity processes:  Novelty:  Originality:  Fluency:  Variety: |
| Brainstorming ideas between attributes of the problems | Behavioural processes:  Creativity processes:  Novelty:  Originality:  Fluency:  Variety:  Elaboration: |
| Brainstorming connections between ideas generated and the problem | Behavioural processes:  Creativity processes:  Selection:  Novelty:  Originality:  Fluency:  Variety:  Elaboration: |
| Selection and development of best ideas in the form of creative solutions | Behavioural processes:  Creativity processes:  Selection:  Development:  Elaboration: |
| Refinement and presentation of solutions | Presentation: |
| Comments: | | |

Source: adapted from Creswell (2003)

6. Data Protocol

We collected data and insights on the following dimensions:

1. Role of structured intervention in changing KSAs around creativity
2. Creativity behaviours during the structured intervention process
3. Dimensions of the structured intervention that facilitated the development of creativity KSAs:
4. teamwork learning dimensions
5. academic involvement and inputs
6. experiential learning processes
7. feedback and research findings on use of creativity techniques by employees
8. ongoing engagement of stakeholders with academic over duration of the intervention
9. Changes in the organisational context during the structured intervention
10. Value of the structured intervention in generating stakeholders’ theories-in-use and HRM theory

7. Suggestions for Collaborative Research

* Identify a specific and relevant organisational problem with key stakeholders; assess the scope of the collaboration and determine aspects that the organisation may (not) want to address
* Understand the politics of the interaction and issues related to power dynamics; negotiate access to the study population and documentation, particularly in the case of sensitive issues
* Educate stakeholders on research processes and the nature of research; likewise, ask stakeholders to inform academics on challenges in practice
* Utilise inclusive and non-academic language to communicate with stakeholders; spend time with the organisation to better understand stakeholders’ needs
* Co-design and plan the content and procedure of the collaboration; jointly decide on appropriate sample participants, develop timelines, and set expectations
* Develop continuous stakeholder engagement with feedback points during and beyond the implementation; ensure rigor, reflection, and relevance is upheld throughout the collaboration
* Highlight the value of structured interventions, activating cycles of experiential learning; focus on learning mindset as an important characteristic to sustain experiential learning; observe learning techniques; emphasise the importance of facilitators and a supportive work environment

References

Brem, A. (2019). Creativity on demand: How to plan and execute successful innovation workshops. *IEEE Engineering Management Review*, *47*, 94-98.

Creswell, J.W. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: SAGE Publications.

Guerci, M., Radaelli, G., & Shani, A.B. (2019). Conducting Mode 2 research in HRM: A phase‐based framework. *Human Resource Management, 58,* 5-20.