Workload and Social Support: Effects on Performance and Stress

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A work simulation was conducted to test the effects of workload on stress and performance. Social support was also investigated as a moderator variable. Two hypotheses were tested: (a) stress is an intervening variable between workload and performance and (b) social support moderates the workload-stress relation such that workload leads to lower stress when social support is high. For the 1st hypothesis, a path analysis showed an indirect relation between workload and performance with stress as an intervening variable. For the 2nd hypothesis, there was a significant 3-way interaction between workload, social support, and time. The interaction showed that, in the early stages of the simulation, high workload led to higher stress when social support was low, whereas high social support moderated the effect of workload on stress.
METHOD

The goal of this research is to evaluate the effectiveness of the proposed method in improving the performance of a deep learning model for image classification. The proposed method involves feature extraction and classification using convolutional neural networks (CNNs). The evaluation is performed using a benchmark dataset consisting of images from different categories. The results show a significant improvement in accuracy compared to the baseline model. Further experiments are conducted to investigate the impact of different hyperparameters on the model's performance. The findings suggest that the proposed method can be an effective approach for improving the performance of deep learning models in image classification tasks.

Hypotheses

- The proposed method will improve the model's performance compared to the baseline model.
- The effectiveness of the proposed method will be dependent on the choice of hyperparameters.
- The proposed method will be applicable to a wide range of image classification tasks.

Overview of Design

The study is designed to evaluate the performance of the proposed method using a benchmark dataset. A cross-validation strategy is employed to ensure the reliability of the results. The model is trained using a modified version of the ResNet architecture, and the hyperparameters are tuned using an optimization algorithm. The performance metrics used for evaluation include accuracy, precision, recall, and F1-score. The results are compared to those obtained using the baseline model. The findings indicate that the proposed method leads to a significant improvement in model performance.
Participants

Eighty participants were evenly assigned to the experimental groups. The experimental and control conditions were balanced across all participants. The participants were divided into two groups: a control group and an experimental group. The control group consisted of participants who received the standard treatment, while the experimental group received the enhanced treatment.

The control group received a traditional training program, while the experimental group received a more interactive and engaging training program. The training programs were implemented using online learning modules, and the participants were monitored and assessed throughout the training process.

Independent Variables

The independent variables were categorized into two groups: participant characteristics and training methodology. Participant characteristics included age, gender, and previous experience with similar training programs. Training methodology included the type of training program, the duration of the training, and the level of interactivity.

Conclusion

The results of the study showed that the experimental group performed significantly better than the control group. The enhanced training program was found to be more effective in improving the participants' performance and satisfaction compared to the traditional training program.

Future Research

Future research could focus on exploring the long-term effects of the enhanced training program and comparing it with other innovative training methodologies. Additionally, the study could be expanded to include a larger sample size and a more diverse group of participants to generalize the findings.
RESULTS

WORKSHOP AND SOCIAL SUPPORT
DISCUSSION

The subject of stress is a complex construct with both confounding and complementary variables, and a need for research on the role of social support as a moderator (Hypothesis 2). This study attempted to explain some of these variables, and provide support for the role of social support in the experience of stress.

Overall, the results of this study suggest that social support plays a significant role in the experience of stress. The correlation between social support and stress was found to be positive, with higher levels of social support being associated with lower levels of stress. This finding supports previous research in this area.

The results also suggest that social support is a multidimensional construct, with different types of social support (e.g., emotional, instrumental) having different effects on stress. Further research is needed to explore these potential differences in the effects of different types of social support.

In conclusion, the results of this study provide evidence for the role of social support as a moderator of the relationship between stress and various outcomes. These findings have important implications for the development of interventions aimed at reducing stress, and improving well-being and quality of life.
WORKSHEET AND SCORING FORM

Student Name:

Date:

Instructions:

1. Read the passage carefully.
2. Answer the questions below.
3. Show all your work.

Questions:

1. What is the main idea of the passage?
2. How does the author support their main idea?
3. What are some examples of the author's evidence?

Discussion:

1. Discuss the significance of the passage.
2. How does the passage relate to your own experiences?
3. What questions do you have about the passage?

Conclusion:

1. Summarize the key points of the passage.
2. Reflect on what you have learned.
3. How can you apply this knowledge to real-world situations?
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