



# WISSENSCHAFT- LICHES ARBEITEN

## ÜBUNG 4

# **SELBSTSTUDIUM: SELBSTERFAHRUNG - FRAGEBOGEN**

**In dieser Aufgabe geht es darum selbst einen Fragebogen auszufüllen und im Anschluss auszuwerten.**

**Der Fragebogen ist die deutsche Übersetzung des BFI-2 von Danner et al. (2019) und misst die fünf Persönlichkeitsdimensionen**

**Verträglichkeit, Offenheit, Gewissenhaftigkeit, Extraversion sowie Neurotizismus.**

- a) Beantworten Sie die Items des Fragebogens. Sie werden Ihren Fragebogen im Anschluss selbst auswerten. Wir werden nicht nach Ihren Werten fragen. Falls es Ihnen dennoch unangenehm ist, können Sie natürlich auch fiktive Angaben machen.
- b) Bestimmen Sie Ihre Mittelwerte für jede der fünf Persönlichkeitsdimensionen entsprechend der Erklärungen auf der nächsten Seite.

# SELBSTSTUDIUM: SELBSTERFAHRUNG - FRAGEBOGEN

| Persönlichkeitsdimension | Items                                               |
|--------------------------|-----------------------------------------------------|
| Extraversion             | 1, 6, 11i, 16i, 21, 26i, 31i, 36i, 41, 46, 51i, 56  |
| Verträglichkeit          | 2, 7, 12i, 17i, 22i, 27, 32, 37i, 42i, 47i, 52, 57  |
| Gewissenhaftigkeit       | 3i, 8i, 13, 18, 23i, 28i, 33, 38, 43, 48i, 53, 58i  |
| Neurotizismus            | 4i, 9i, 14, 19, 24i, 29i, 34, 39, 44i, 49i, 54, 59  |
| Offenheit                | 5i, 10, 15, 20, 25i, 30i, 35, 40, 45i, 50i, 55i, 60 |

|                          | Stimme überhaupt nicht zu | Stimme eher nicht zu | Teils, teils | Stimme eher zu | Stimme voll und ganz zu |
|--------------------------|---------------------------|----------------------|--------------|----------------|-------------------------|
| Items ohne i             | 1                         | 2                    | 3            | 4              | 5                       |
| Items mit i (invertiert) | 5                         | 4                    | 3            | 2              | 1                       |

**Für jede Dimension den Mittelwert über alle Items bilden!**

# SELBSTSTUDIUM: SELBSTERFAHRUNG - FRAGEBOGEN

**Referenzwerte (wichtig: relativ kleine Stichprobe, nicht überinterpretieren)**

Durchschnittsbereich:

- ca.  $\bar{x} - s_x$  bis  $\bar{x} + s_x$
- entspricht  $\approx 68\%$  aller Personen

|                    | $\bar{x}$ | $s_x$ |
|--------------------|-----------|-------|
| Extraversion       | 3.22      | 0.63  |
| Verträglichkeit    | 3.76      | 0.51  |
| Gewissenhaftigkeit | 3.67      | 0.62  |
| Neurotizismus      | 2.72      | 0.67  |
| Offenheit          | 3.38      | 0.64  |

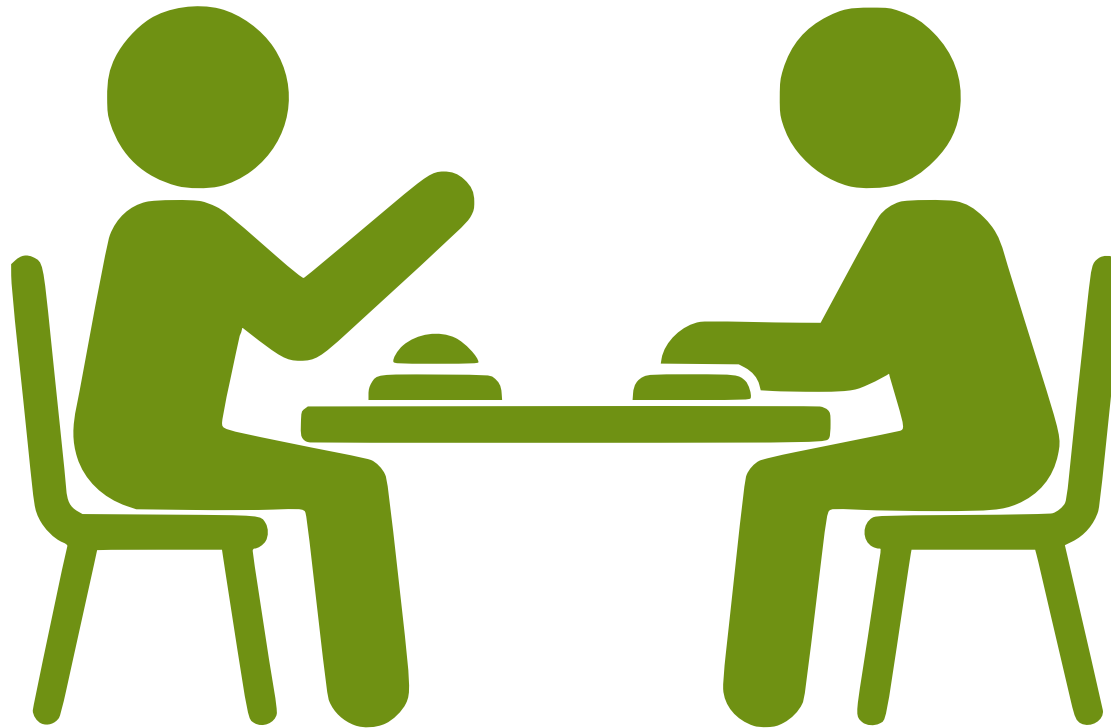
## AUFGABE 1: GÜTEKRITERIEN

**In der Vorlesung haben Sie eine Reihe von Gütekriterien kennengelernt. Mit diesen wollen wir uns nun etwas beschäftigen**

- a) Schauen Sie sich zunächst nochmals die Haupt- und Nebengütekriterien aus der Vorlesung an und überlegen Sie sich für jedes Gütekriterium ein Beispiel, welches zeigt, wie dieses verletzt sein kann.
- b) Schauen Sie sich in Kleingruppen (2-3) den Artikel von Danner et al. (2019) zur deutschen Version des BFI 2 an – welche Rückschlüsse können wir auf die Erfüllung der Gütekriterien ziehen?



## AUFGABE 2: QUIZ STUDIENDESIGNS



# THE PSYCHOLOGY AND NEUROSCIENCE OF CURIOSITY

Curiosity is a basic element of our cognition, but its biological function, mechanisms, and neural underpinning remain poorly understood. It is nonetheless a motivator for learning, influential in decision-making, and crucial for healthy development. One factor limiting our understanding of it is the lack of a widely agreed upon delineation of what is and is not curiosity. Another factor is the dearth of standardized laboratory tasks that manipulate curiosity in the lab. Despite these barriers, recent years have seen a major growth of interest in both the neuroscience and psychology of curiosity. In this Perspective, we advocate for the importance of the field, provide a selective overview of its current state, and describe tasks that are used to study curiosity and information-seeking. We propose that, rather than worry about defining curiosity, it is more helpful to consider the motivations for information-seeking behavior and to study it in its ethological context.

# CHANGES IN MENTAL HEALTH SERVICE USE AMONG 8-YEAR-OLD CHILDREN: A 24-YEAR STUDY

The use of children's mental health services has increased, but most children with psychiatric problems are still not in contact with these services. This study assessed changes in considered and reported service use over a 24-year period and studied the factors associated with it using four cross-sectional studies. Information was gathered on 8-year-old children living in the area covered by Turku University Hospital, Finland, at four time points: 986 children in 1989, 891 in 1999, 930 in 2005, and 942 in 2013. The same study design, methods and school districts were used each year and the participation rates varied between 86 and 95%. Parents and teachers completed questionnaires concerning the child's psychiatric symptoms and service use. The considered and reported service use increased continuously during the study period. In 1989, 2.4% of children had used services and in 2013 this was 11.0% (OR 5.0, 95% CI 3.1–8.0). Reported service use also increased among children with comorbid problems, from 18.3 to 50.7% (OR 5.0, 95% CI 2.1–12.0). Psychiatric problems and some family factors were associated with service use, but the increase was not explained by these factors. The increase in child mental health service use may reflect better public awareness of mental health problems, fewer barriers to accessing care and decrease of stigma. Although more children are using mental health services, there are still a large number of children with mental health problems who have not been in contact with services.

# PSYCHOLOGICAL SAFETY

Although psychological safety research has flourished in recent years, and despite the empirical support for the important role of psychological safety in the workplace, several critical questions remain. In order to address these questions, we aggregate theoretical and empirical works, and draw on 136 independent samples representing over 22,000 individuals and nearly 5,000 groups, to conduct a comprehensive analysis on the antecedents and outcomes of psychological safety. We not only present the nomological network of psychological safety but also extend this research in 4 important ways. First, we compare effect sizes to determine the relative effectiveness of antecedents to psychological safety. Second, we examine the extent to which psychological safety influences both task performance and organizational citizenship behaviors over and beyond related concepts such as positive leader relations and work engagement. Third, we examine whether research design characteristics and national culture alter validities within the nomological network, thus promoting a more accurate and contextualized understanding of psychological safety. Finally, we test the homology assumption by comparing the effect sizes of the antecedents and outcomes of psychological safety across individual and group levels of analysis. We conclude with a discussion of the areas in need of future examination.

# PSYCHOLOGICAL VIRTUES DURING ADOLESCENCE: A STUDY OF GENDER DIFFERENCES

Adolescence is a key stage in terms of character formation, and it is important to study positive aspects such as character strengths and virtues. To this end, this study uses methodology to analyse character virtues over three consecutive years during adolescence. Participants were 282 school students, whose mean age at the first measurement point was 12.10 years. Results show that character virtues remain relatively stable between the ages of 12 and 14 years, with a slight increase over time in scores on humanity and justice. Girls scored higher than boys on all six virtues analysed, and this trend was maintained over time. The paper discusses these findings and their possible implications for achieving optimal psychological development in adolescence.

# SLEEP QUALITY AND ITS PSYCHOLOGICAL CORRELATES AMONG UNIVERSITY STUDENTS IN ETHIOPIA

## Background

Sleep is an important physiological process for humans. University students in most resource limited countries often report poor sleep quality due to changing social opportunities and increasing academic demands. However, sleep quality among university students has not been studied in Ethiopia. Thus, this study assessed sleep quality and its demographic and psychological correlates among university students.

## Methods

A survey was conducted in two universities in Ethiopia. Multistage sampling procedures were used to enroll 2,817 students into the study. A self-administered structured questionnaire including the Pittsburgh Sleep Quality Index (PSQI), the Depression Anxiety Stress Scale-21, the Perceived Stress Scale (PSS) and selected modules of the World Health Organization STEPS instrument was used for the study. This research included 2,551 students. Frequency, median, mean with standard deviation and 95% confidence interval were used to characterize sleep quality and other variables. Analysis of variance and binary logistic regression procedures were also used.

## Result

The prevalence of poor sleep quality (total PSQI score > 5) was 55.8% (1,424). Female students (adjusted odds ratio (AOR) 1.23; 95% CI: 1.00, 1.57), second year (AOR 2.91; 95% CI: 2.1, 4.02) and third year students (AOR 2.25; 95% CI 1.62, 3.12) had statistically significant higher odds of poor sleep quality. Perceived stress level and symptoms of depression and anxiety were strongly associated with sleep quality.

## Conclusion

A substantial proportion of university students are affected by poor sleep quality. If our results are confirmed in prospective studies, health promotion and educational programs for students should emphasize the importance of sleep and mental health.

# THE EVALUATION OF REMOTE TOWER VISUAL ASSISTANCE SYSTEM

In the last couple of years, the interest in remote tower operation systems has increased, as a concept to provide cost-efficient air traffic control service to airports. Attempts are made to stretch the concept to enable multiple remote tower control. A couple of challenges have been identified that need to be mitigated to make the concept feasible. For instance, studies revealed the disadvantage of reduced quality of the video panorama and an increased dispersion of information gathering. Design concepts were derived from the top-down and bottom-up mechanisms of human information processing to support multiple remote tower. These concepts could potentially mitigate the negative effects of a reduced quality of the video panorama and also the dispersion of information gathering. This paper focusses on the reduced quality of the video panorama and uses these design concepts to implement three visual assistance systems. These systems were tested within a laboratory study with 40 participants for effectiveness, efficiency, satisfaction, situation awareness, and workload. The microworld FAirControl was used to simulate an air traffic control monitoring task at a single airport. First, the visual assistance systems were compared against the baseline to assess the improvement of each system. Second, in an explorative approach, the visual assistance systems were compared to identify the advantages and disadvantages against each other. The results show that visual assistance systems can mitigate the influence of the quality-reduced video panorama. The results also indicate that usability of the visual assistance systems is crucial. Participant selective information overlay had the best overall performance.

## AUFGABE 3: PARKGESTALTUNG I

«In der Stadt Luzern soll eine Parkanlage neugestaltet werden. Dazu soll eine Umfrage gemacht werden. Wichtig sind der Stadt Luzern natürlich viele verschiedene Aspekte: Welche Wünsche haben die Stadtbewohner\*innen, wie wurde der Park bisher genutzt, wie muss der Park gestaltet sein, damit möglichst viele an der Nutzung partizipieren können, aber auch Aspekte wie den finanziellen und zeitlichen Aufwand, den die Stadt aus Sicht der Bewohner\*innen investieren sollte.

- 1) Sie wollen eine nichtexperimentelle Studie zur Gestaltung des Parks durchführen und interessieren sich zunächst für die generelle Zufriedenheit, d.h. insbesondere Womit sind die Parkbesucher\*innen bisher zufrieden, womit sind sie bisher unzufrieden, wie könnte die Zufriedenheit verbessert werden?
  - 1) Welche Forschungsdesigns würden sich anbieten?
  - 2) Welche Erhebungsmethoden könnten sinnvoll sein? Was wären mögliche Vor- und Nachteile in Bezug auf die Zufriedenheitsmessung.

## AUFGABE 3: PARKGESTALTUNG II

**Gestalten Sie (in Gruppen von 2-3 Personen) einen Fragebogen zur Erhebung der Zufriedenheit der Erwachsenen mit dem Park**

**Ihr Fragebogen sollte 4 Teile haben:**

- 1) Einleitung (Tipps auf nächster Seite)
- 2) Fragen zu für Sie interessante demographische Variablen
- 3) Messung der Zufriedenheit (~10-15 Items als Likertskala, Tipps auf übernächster Seite)
- 4) Verabschiedung



## AUFGABE 3: PARKGESTALTUNG II

### Einleitung

- 1) knappe **Vorstellung Ihrer Person** bzw. Institution
- 2) Information über die **grobe Fragestellung**
- 3) **Hinweis**, dass jeder beantwortete Fragebogen wichtig und wertvoll ist
- 4) Bitte um **ehrliche Antwort** (es keine „richtigen“ und „falschen“ Antworten)
- 5) Zusicherung der **Anonymität**, falls diese auch gewährleistet ist
- 6) **Dank** dafür, dass sich die Person für die Bearbeitung Zeit nimmt



## AUFGABE 3: PARKGESTALTUNG II

### Items

- Fragen sollen **einfache Wörter** enthalten (kein Jargon, Fachsprache vermeiden)
- Fragen sollen **kurz** formuliert sein
- Fragen sollen **konkret** sein
- **Keine Suggestivfragen**
- Fragen sollen **neutral** formuliert sein
- Fragen sollen sich nur auf **einen Sachverhalt** beziehen
- **Keine doppelte Verneinung**
- Fragen sollten **den Befragten nicht überfordern**



