

Modul M4 | P Experimentalpsychologisches Arbeiten



Experimentalpsychologisches Arbeiten – Teil 2

Diskussionsteil

Wintersemester 2023/24

Christoph Scheffel, M.Sc.

christoph_scheffel@tu-dresden.de | BZW A437 | 0351 463-40336

Professur für Differentielle und Persönlichkeitspsychologie

Gliederung

- ✓ Lehrveranstaltungsevaluation
- ✓ Feedback zu Berichtsentwürfen
 - ✓ Theorieteil
- ✓ Wie schreibe ich einen Diskussionsteil?

Lehrveranstaltungsevaluation



<https://befragung.zqa.tu-dresden.de/uz/de/sl/k253PyvfqQiy>

Feedback zu Berichtsentwürfen

Theorieteil

Feedback Theorieteil

Quellenarbeit

- Zitationsrichtlinien nach APA 7 beachten!
- Jede pauschale Aussage, die Sie tätigen, sollten mit ausreichend Quellen unterfüttert werden!

Emotion regulation plays a pivotal role for mental health and interpersonal functioning (Gross, 2002; Gross & John, 2003). When emotion regulation is deficient or poorly matched to situational demands, emotional responses may be excessive, insufficient, or inappropriate. As a consequence, dysfunctional emotion regulation constitutes an important risk factor for the development and maintenance of psychological disorders (Eftekhari, Zoellner, & Vigil, 2009; Sheppes, Suri, & Gross, 2015).

Due to the distinct temporal characteristics and the varying cognitive demands, emotion regulation strategies are suggested to have a differential impact on subjective emotional experience (Gross, 1998a; Van Dillen & Koole, 2007), neural responses (Kanske, Heissler, Schonfelder, Bongers, & Wessa, 2011; McRae et al., 2010; Ochsner & Gross, 2005), and psychophysiological reactivity of emotion (Jackson, Malmstadt, Larson, & Davidson, 2000; Kim & Hamann, 2012; Sheppes, Catran, & Meiran, 2009; Urry, 2010; Urry, van Reekum, Johnstone, & Davidson, 2009).

Feedback Theorieteil

Wissenschaftliches Schreiben

- Umgangssprache vermeiden!
- Lange Sätze vermeiden!

aus Interesse, Kontrollgruppe). Sobald die Proband:innen die jeweiligen Interventionen absolviert und die Zuschreibungsbedingung gelesen haben, beantworten diese die Multiple Affect Adjective Check List (MAACL) und führen eine Anagram Task Performance-Aufgabe durch, um damit die Leistungsfähigkeit in konzentrationsbedingten Aufgabenbereichen trotz der verschiedenen Interventionen und unterschiedlichen Zuschreibungsbedingung zu messen.

Feedback Theorieteil

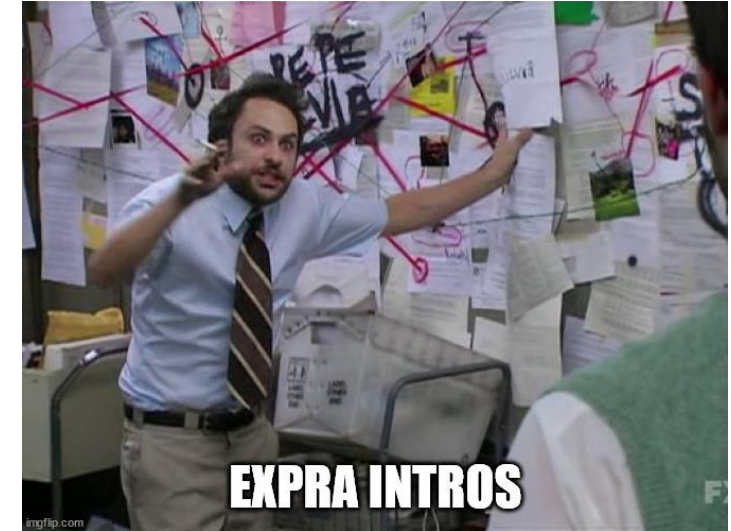
Struktur und Roter Faden

- Vermeiden Sie ständige Wechsel zwischen Konzepten, Operationalisierungen, Settings, etc.!

Möglicher Aufbau:

1. Theoretischer Hintergrund
 - 1.1. Hinführung
 - 1.2. Entscheidungsverhalten
 - 1.2. Need for Cognition
 - 1.3. [...]

1. Hinführung
2. Theoretischer Hintergrund
 - 2.2. Alltagsrelevantes Entscheidungsverhalten
 - 2.2. Need for Cognition
 - 2.3. [...]



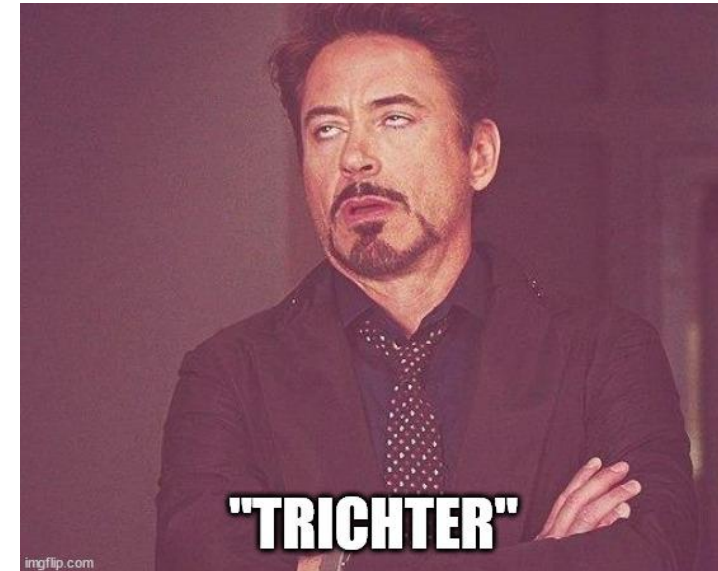
Feedback Theorieteil

Struktur und Roter Faden → Überleitungen!

Es sollte aus dem Text hervorgehen, warum nun genau der nächste Punkt angesprochen wird!

- Fangen Sie relativ breit an, konzentrieren Sie sich auf eines der beiden interessierenden Konstrukte:
 - Was ist das? Warum ist es wichtig, das zu untersuchen?
 - Wie wird es operationalisiert?
 - Welche Ergebnisse zeigen Studien dazu? Was sind beeinflussende Faktoren?
- aus diesen Faktoren ergibt sich dann die Überleitung zum nächsten Konstrukt, dieses muss auch wieder erklärt werden

→ Trichter



Feedback Theorieteil

Struktur und Roter Faden → Überleitungen!

Beispiele:

appraisal of a situation or stimulus (e.g., as negative) in favor of selecting an alternative appraisal (e.g., as neutral or even positive). Given that these upcoming appraisals and elicited emotions can be understood as prepotent responses, inhibitory control seems to be a particularly relevant process when it comes to their regulation.

Inhibitory control represents a core component of cognitive control and focuses on the ability to actively inhibit or delay a dominant response in order to achieve a goal (Friedman & Miyake, 2004; Harnishfeger, 1995; MacLeod, 2007; Miyake et al., 2000; Nigg, 2000). It has been reported as an underlying mechanism in different skills and achievements, such as attention,

Feedback Theorieteil

Struktur und Roter Faden → Überleitungen!

Beispiele:

academic and work contexts. Individuals high in NFC have more positive emotions at the end of the work day ([Rosen et al., 2020](#)), higher work motivation, perceive their roles as less ambiguous ([Nowlin et al., 2017](#)), are less likely to drop out of college ([Grass et al., 2017](#); [Klaczynski and Fauth, 1996](#)), and have less anxiety regarding their course work ([Karagiannopoulou et al., 2020](#)), with these associations being in a small to medium range. These findings suggest that individuals high in NFC might be less prone to experience adverse effects of work stress, which range from physical ([Dragano et al., 2017](#); [Steptoe and Kivimäki, 2013](#)) to psychological consequences ([Madsen et al., 2017](#); [Maslach and Leiter, 2016](#); [Wiesner et al., 2005](#)).

One of these psychological consequences is burnout, a state of exhaustion and cynicism caused by long-term overstimulation in the workplace, which results in employees being dissatisfied, being sick more often, and performing poorly ([Schaufeli and Salanova, 2014](#)). Burnout is especially prevalent in social jobs such as healthcare or teaching because the worker is often in conflict between advocating for their client and meeting the goals set by the employer ([Gray-Stanley and Muramatsu, 2011](#); [Lloyd et al., 2002](#)). [Lackritz \(2004\)](#) found that university teachers' burnout scores were higher the more students they had, the higher

Feedback Theorieteil

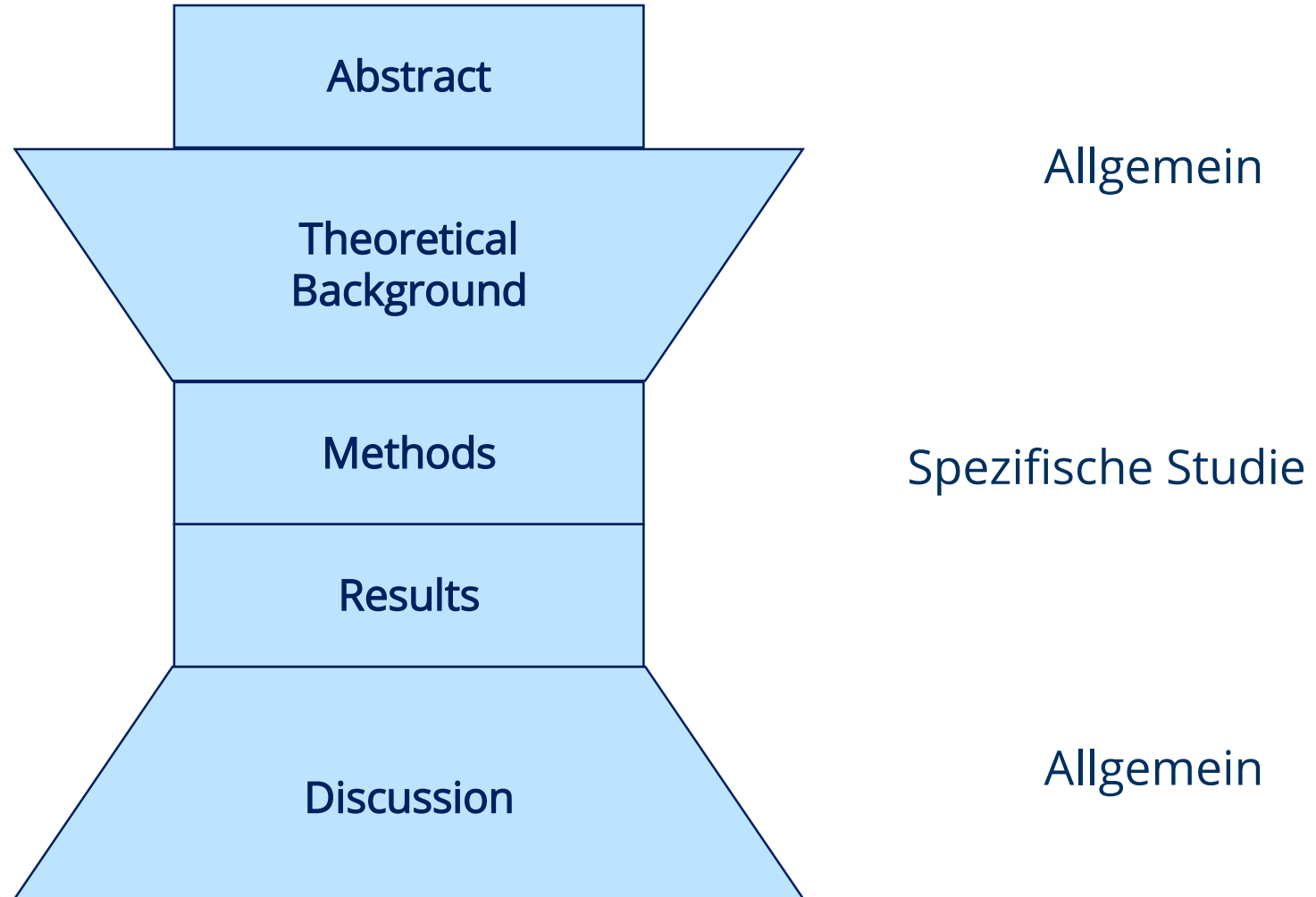
Zusammenfassung: Was muss nach dem Theorieteil klar sein?

- Warum ist das (Kern-) Konstrukt relevant? Welche empirischen Befunde sind dazu bereits gefunden worden?
- Wie hängt das Konstrukt mit weiteren interessierenden Konstrukten zusammen?
- Was wurde in der Originalstudie gefunden
- Was gibt es daran zu kritisieren? Warum sollte man diese Studie *nochmal* durchführen?
- Welche konkreten Ziele haben wir dann in unserer Replikationsstudie verfolgt?

Wie schreibe ich einen Diskussionsteil?

Diskussionsteil

Genereller
Aufbau eines
Artikels



Diskussionsteil

Funktion der Diskussion

Gruppendiskussion

Was kennzeichnet eine misslungene Diskussion?

Was kennzeichnet eine gute Diskussion?

Wozu dient eine Diskussion?



Diskussionsteil

Interpretation und Einordnung der Ergebnisse

Zusammenfassung der Ergebnisse (keine Statistik, nur narrativ)

Die Diskussion beantwortet diese Fragen in der Reihenfolge

- *Was kam raus? (Zusammenfassung)*
- *Was bedeutet das? (Interpretation) → Was bedeutet das für die Originalstudie?*
- *Was sagen andere dazu? (Einordnung)*
- *Was könnte man besser machen oder weiterforschen? (Limitations)*
- *Warum war das nochmal wichtig? (Conclusion)*

Schreiben Sie erstmal diese Überschriften auf und dann füllen Sie sie systematisch.

Anschließend nehmen Sie diese Überschriften wieder aus dem Text raus bzw. ersetzen diese durch aussagekräftigere Überschriften.

Stehenlassen können Sie am Ende nur die Überschriften Limitations und Conclusion

Diskussionsteil

Interpretation und Einordnung der Ergebnisse
Zusammenfassung der Ergebnisse (keine Statistik, nur narrativ)

Was kam raus? (Zusammenfassung)

Bsp. 2:

In this study, we examined the relationship between six commonly used inhibitory control tasks and aimed at replicating the general pattern of two closely related latent variables (prepotent response inhibition, resistance to distractor interference). In addition, well-known speed-accuracy trade-offs were taken into account by considering inverse efficiency scores (IES). In line with previous studies ([Aichert et al., 2012](#); [Cheung et al., 2004](#); [Enge et al., 2014](#); [Enticott et al., 2006](#)), we found generally low and non-significant zero-order correlations between the six tasks. By using standard reaction

Bsp. 1:

2.3. Discussion

The results from experiment 1 show that the high NFC group outperformed the low NFC group on the IGT. However, due to the complex nature of the IGT, this could be the result of multiple processes. One possible explanation consistent with previous work is that high NFC participants recognized the deeper structure of the task choosing a strategy more closely aligned with learned expected values while low NFC participants choose a strategy based

Diskussionsteil

Interpretation und Einordnung der Ergebnisse
Zusammenfassung der Ergebnisse (keine Statistik, nur narrativ)

Interpretation?

Bsp. 2:

low and non-significant zero-order correlations between the six tasks. By using standard reaction time difference scores, we were not able to replicate a satisfactory latent variable model with good fit to the data. In contrast, by using IES, both a two-related and a one-factor model with the latent variable response-distractor inhibition indicated mediocre fit to the data and resembles previous literature ([Friedman & Miyake, 2004](#)), although only four out of six tasks demonstrated significant factor loadings. The results highlight the difficulty in finding robust inter-correlations between inhibitory control tasks, even when accounting for speed-accuracy trade-offs, thereby possibly reflecting the consequence of the task impurity problem.

Bsp. 1:

The current work shows that the IGT can be used successfully to study individual differences in decision making, providing both support and more detail to previous research while maintaining relevance to real world outcomes. Results from the two experiments together provide evidence of decision making differences between individuals differing in NFC. Experiment 1 showed that the high NFC participants performed better on the IGT than the low NFC group. To determine whether this difference was due to participants in the low NFC group relying on initial impressions or whether high and low NFC groups differentially weighted gains and losses, experiment 2 utilized a modified version of the IGT designed to reverse the importance of gains and losses. Following the predictions of differential weighting of gains and losses, the differences found in Experiment 1 disappeared. Evidence for differential

Diskussionsteil

Interpretation und Einordnung der Ergebnisse
Zusammenfassung der Ergebnisse (keine Statistik, nur
narrativ)

Einordnung?

The magnitudes of the correlations between the six inhibitory control tasks were generally low (.29 or smaller), but are consistent with the results of previous studies and seem not to be restricted to college samples, but also present in samples with a wider age range and across different levels of intellectual abilities ([Cheung et al., 2004](#); [Enge et al., 2014](#); [Enticott et al., 2006](#); [Friedman & Miyake, 2004](#); [Miyake et al., 2000](#); [Shilling, Chetwynd, & Rabbitt, 2002](#); [Singh et al., 2018](#); [Wolff et al., 2016](#)). This is why we applied a latent variable analysis: By extracting common variance that is shared by all tasks, latent variables provide purer measures, thereby reducing measurement error and the task impurity problem. Indeed, the fit for the null model (assuming that the covariances among all tasks

Diskussionsteil

Limitations

Bsp. 1:

possible. Though the current data was collected using a homogeneous sample in regards to age and education, two variables known to effect IGT performance (Wood et al., 2005; Evans, Kemish, & Turnbull, 2004), future work is needed to examine other possible third variable explanations such as IQ and memory capacity.

Bsp. 2:

Limitations and future directions

Although all inhibitory control tasks were adopted from Friedman and Miyake (2004), there were some variations compared to their study (e.g., Stroop task with color-word conflict instead of number-denotation conflict; stop-signal task with standard response format per button press instead of an auditory version and without tracking method). At least regarding the Stroop task, this might explain why our mean Stroop effect was approximately 100 ms smaller (147 vs. 48 ms; stop-signal reaction time was comparable with 370 vs. 332 ms). However, as we have shown previously,

Diskussionsteil

Limitations

A further limitation related to the antisaccade task is that because no eye-tracker was used in the study, we cannot rule out that direction errors were missed or wrongly detected. Furthermore, the visual angle was only about 2°. A study by Kane et al. ([2001](#)) has shown that a larger visual angle (around 11°) produces more reliable results. However, at least the general error rate is comparable to other studies (e.g., [Friedman & Miyake, 2004](#)).

Diskussionsteil

Limitations

With a sample size of 190, the present study also meets stricter criteria for a case-to-parameter ratio of 10-20:1 instead of 5:1 ([Kline, 2016](#)). However, this sample size may still be insufficient when applying χ^2 difference tests to decide between competing models with few degrees of freedom ([Kenny et al., 2015](#)). Although we wanted to stay as close as possible to Friedman and Miyake's latent variable analyses, further studies might apply Monte Carlo simulations (e.g., [Muthén & Muthén, 2002](#)) for determining adequate sample sizes for model comparisons. A larger sample size (>250) would also benefit the examination of robust intercorrelations (e.g., see [Schönbrodt & Perugini, 2013](#)).

Diskussionsteil

Limitations

Another general limitation of studies like ours regards sample composition. By investigating young healthy adults in an academic setting (students), it is possible that their general cognitive control ability is already in the upper range compared to the general population or clinical samples (e.g., patients with ADHD), resulting in relatively homogenous inhibitory control performance. This could make it even more difficult to find reliable interindividual differences and potentially underestimate the effect size. In contrast, it is reasonable to speculate that individual differences in inhibition could be found in clinical samples, or can be used to distinguish between clinical and non-clinical samples. Further studies should compare different samples, for example adults of the general population and clinical patients, in order to enhance heterogeneity in the cognitive control measures (but see [Rey-Mermet et al., 2018](#), who studied inhibitory control in young and old adults but still found only weak evidence for inhibition as a psychometric construct).

Diskussionsteil

Interpretation und Einordnung der Ergebnisse

Zusammenfassung der Ergebnisse (keine Statistik, nur narrativ)

Limitations

Bitte nicht die eigene Studie schlecht machen, herabwürdigen, bashen...!

Wir wollen uns mit möglichen Einwänden auseinandersetzen:

1. Möglichen Einwand benennen
2. Argumente, warum das evtl. nicht problematisch ist, oder was man versucht hat um das zu kontrollieren
3. evtl: was kann man in Zukunft besser machen

Diskussionsteil

Conclusion

In conclusion, the current work finds clear differences in IGT performance between groups differing in NFC. This finding is important in regards to future work using the IGT, in terms of accounting for variability in control populations. Additionally the current work can provide an important perspective regarding the underlying processes at work in IGT performance. Though support was found for the hypothesis that performance differences between high and low NFC groups are the result of differential weighting of gains and losses, other alternative explanations are possible. Though the current data was collected using a homogeneous sample in regards to age and education, two variables known to effect IGT performance (Wood et al., 2005; Evans, Kemish, & Turnbull, 2004), future work is needed to examine other possible third variable explanations such as IQ and memory capacity.

Diskussionsteil

Conclusion

Conclusion

Go to: ►

In sum, our inhibition measures correlated only weakly. By accounting for speed-accuracy trade-offs using inverse efficiency scores, we were able to extract a two-related-factor and a one-factor model, respectively, but only four out of six tasks demonstrated significant factor loadings in these models. Together, these results add to the growing body of research that calls into question whether individual differences in inhibitory control can be measured reliably and validly with the existing tasks. Future studies need to generate and test specific predictions on task demands, and think of alternative measures than difference scores when investigating individual differences, or develop new tasks that are able to tap more inhibition-related variance. Otherwise, the concept of inhibitory control as a common process may no longer withstand (cf. [Noreen & MacLeod, 2015](#)).

Diskussionsteil

Diskussion für Replikation:

- *Zusammenfassung*
- *Interpretation: Implikationen in Bezug auf Originalstudie und Forschungsfeld*
- *Einordnung: Bestätigung und Widerspruch der Replikation im Lichte anderer Forschung*
- *Limitations: Mögliche Unterschiede zur Originalstudie*
- *Conclusion: Ausleitung, wie steht das Feld nun da, was bedeutet das alles für die Forschungsfrage und zukünftige Forschung*

Diskussionsteil

Generelle Anmerkungen:

- Jedes Argument sollte sauber ausgeführt sein – dafür lieber einen Satz mehr verwenden, als einen Satz zu wenig
- alle Aussagen müssen belegbar sein → Entweder mit Ihren Daten oder mit Zitaten!
- Etwas im Hinterkopf behalten: Was ist neu von Ihnen? Was sagen die Autor:innen der Originalstudie?

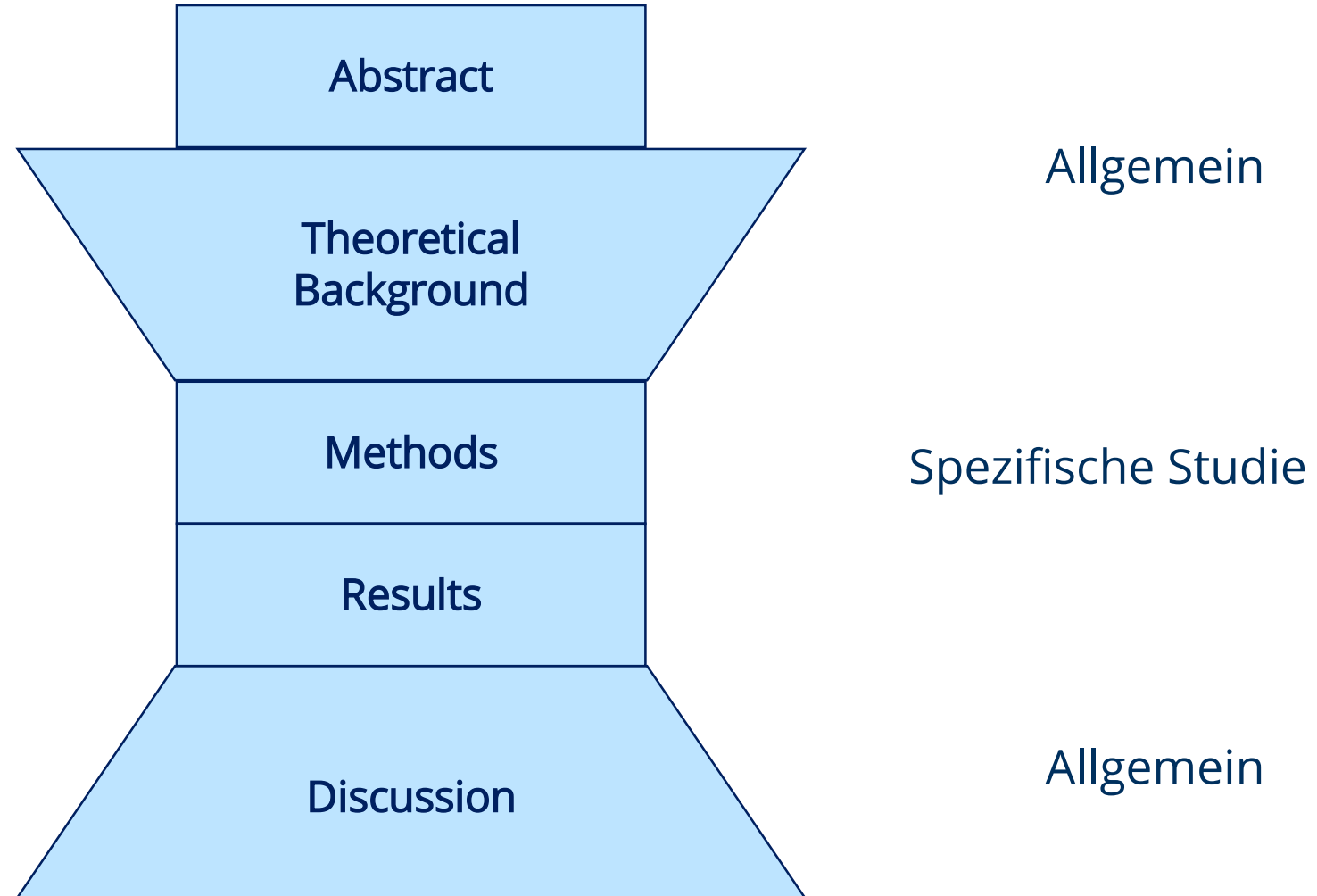
Diskussionsteil

Was sollte auf jeden Fall im Diskussionsteil enthalten sein?

- Zusammenfassung der Ergebnisse → Konnten die Hypothesen bestätigt werden oder nicht? (für jeden Hypothese einzeln)
- Implikationen der Ergebnisse und Einordnung ins Forschungsfeld → Wie sind die Ergebnisse ins Forschungsfeld einzuordnen? Was ist gleich oder auch unterschiedlich zur Originalstudie, aber auch zu weiteren Studien, die gleiche oder gegensätzliche Effekte gefunden haben?
- Welche weiteren Erklärungen könnten Sie in anderen Theorien / Studien finden, die die Ergebnisse erklären könnten? Widersprechen die Ergebnisse eventuell einer Theorie? (→ Welche Variablen sollte man künftig mit untersuchen?)
- Methodische Anmerkungen: Was lernen Sie aus unserer Studie? Was sollte man künftig beachten / anders machen, welche Empfehlungen geben Sie (→ Einordnung in die Literatur)

Abstract

Genereller
Aufbau eines
Artikels



Abstract

Zusammenfassung: der wichtigste Teil des Artikels!

- Was ist das Thema?
- Was war die Theorie/Hypothese?
- Wie haben wir das untersucht?
- Was kam heraus?
- Was bedeutet das?

A B S T R A C T

Differences in decision making between individuals differing in Need for Cognition (NFC) are examined using the Iowa Gambling Task (IGT). Previous work using normative one time decisions suggests that individual low in NFC process gains and losses differently than those high in NFC and are more susceptible to decision biases. The IGT is a popular laboratory task that involves making risky decisions from experience involving both gains and losses. In the first experiment, low NFC participants performed significantly worse than the high NFC participants. A second experiment designed to examine the nature of these differences provides evidence that low NFC participants place more importance on gains as opposed to losses when performing the IGT. Results are discussed in light of previous work suggesting that low NFC participants place more importance on losses in mixed outcome decisions.

Abstract

Zusammenfassung: der wichtigste Teil des Artikels!

Evtl. hilfreich: Überschriften
Aims/Background – Methods –
Results - Conclusions

Background: Cigarette smoking is a widespread behaviour and associated with increased risk for nicotine dependence, morbidity and mortality. The structured group-based intervention 'Rauchfrei-Programm' is effective; however, no study has yet identified psychological factors predicting immediate (within two weeks after smoking cessation), short-term (within 3 months) and middle-term relapse (within 6 months).

Methods: This naturalistic pre-post-follow-up phase-3 field study analyses self-reported smoking status, age, gender, percentage of smoking friends and questionnaire scores for self-efficacy, severity of dependence and perceived social support of $N = 160$ treatment-seeking outpatients (out of $N = 556$ overall participants) using binary logistic regressions.

Results: Immediate relapse (18.8%) was not predicted by any predictor. Short-term relapse (55.6%) was predicted by lower self-efficacy ($OR = 0.87$), higher percentage of smoking friends ($OR = 1.02$) and more severe nicotine dependence ($OR = 1.19$). Middle-term relapse (64.4%) was predicted by lower self-efficacy ($OR = 0.90$) and higher percentage of smoking friends ($OR = 1.02$).

Conclusions: Results support the standard relapse prediction model, proposing self-efficacy during and after the intervention as an important factor for relapse for up to 6 months after cessation. We recommend a regular assessment of self-efficacy in the 'Rauchfrei-Programm' and standardized strategies to intervene with low-esteem participants. Findings might be limited to multimodal and structured group interventions.

Kuitunen-Paul, Scheffel, et al. (2018). *Journal of Substance Use*.

Ausblick

Ausblick

nächster Termin: 09.01.24 - Schreibwerkstatt Diskussionsteil

BZW ASG14

nächster gemeinsamer Termin: 23.01.2024

Feedback Diskussionsteil, Abschluss

BZW ASG14