

**Abgeschlossene Projekte der Sektion Psychosomatische Versorgungsforschung der
Abteilung Psychiatrie und Psychotherapie I der Universität Ulm im Jahr 2021**

**Psychologische Veränderungen bei kardiologischen Patienten nach Durchführung
einer Koronarangiographie**

Es wurden zwei aufeinander bauende Promotionsarbeiten, die inzwischen abgeschlossen sind (Marcela Milani und Magdalena Ciurus) in einer übergeordneten Studie mit vier Messzeitpunkten evaluiert und in einer internationalen Fachzeitschrift publiziert

Valdés-Stauber J, Milani M, Ciurus M, Bachthaler S. *Changes of mental status after coronary angiographic intervention: pre-post-comparison and follow-up*. Psychology, Health and Medicine 2021; DOI: 10.1080/13548506.2021.1968011

Abstract

Epidemiological studies demonstrate the relevance of cardiovascular diseases for health policies and medical care, especially coronary heart diseases and myocardial infarction. Research has shown that a significant proportion of patients undergoing coronary angiography suffer from clinically relevant mental stress. The aim of this study is to investigate to what extent the psychological state of cardiology patients changes in short- and mid-term periods after coronary angiography has been performed. The study design is naturalistic, longitudinal and comparative about consecutively admitted patients undergoing coronary angiography ($N = 419$; consenting patients fulfilling inclusion criteria $n = 68$) at four measurement points: before and after angiography and 6 weeks and 6 months after discharge. The statistical analysis includes paired t -tests, chi-square tests, effect sizes and random effects regression models. The sample was representative of the target population. The prevalence of risk factors were: 84% heart attack, 31% diabetes and 84% hypertension. There were no angiographic pathological findings in 12% of the sample. The neuroticism levels of the sample was higher than in the general population. There were almost no pre-post differences for depression, anxiety, psychological well-being, self-efficacy, resilience or locus of control. At the mid-term, well-being and anxiety decreased and internal locus of control increased. Neuroticism was negatively and extraversion and openness were positively associated with mental state and resources. The sample showed persistent adverse subsyndromal depressivity. At the mid-term, patients realised that their prognosis also depends on their own behaviour (internal attribution). Special psychosomatic attention should be given to people with subsyndromal depression, higher emotional instability and those with angina pectoris symptoms displaying normal coronary angiography.

Zusammenhänge zwischen Zahnbehandlungsphobie und anderen Angstformen

Der Zusammenhang zwischen Dentophobie und anderen Angstformen wurde anhand einer Stichprobe einer Großstadt Zahnarztpraxis unter Einsatz von validierten Fragebögen und multivariaten Modellen in einer Promotionsarbeit (Kevin Hummel) untersucht. Die Publikation in einer internationalen Fachzeitschrift exploriert die Zusammenhänge anhand von multivariaten Modellierungen.

Valdes-Stauber J, Hummel K. *The relationship between dental anxiety and other kinds of anxiety: a naturalistic, cross-sectional and comparative study*. BMC Psychology 2021; 9:184.

Abstract

Background: Dental anxiety is of public health importance because it leads to postponed dental treatment, which comes with health complications. The present study investigated whether there is a correlation between the degree of dental anxiety and other kinds of anxiety and whether there are prognostic factors for the different kinds of anxiety.

Method: In the sample (N = 156) from a dental practice in a large German city, 62% of patients received a checkexamination and 38% received dental surgery. The target variables were recorded with validated questionnaires: dental anxiety (IDAF-4c+), subclinical anxiety (SubA), anxiety of negative evaluation (SANB-5), current general anxiety (STAI state), loneliness (LS-S) and self-efficacy (GSW-6). The applied statistics were: t-tests for 31 variables, correlation matrix and multivariate and bivariate regression analyses.

Results: The dental surgery patients displayed more dental anxiety and more dental interventions than the checkexamination group. The main result was a positive correlation of all kinds of anxiety with each other, a positive correlation of loneliness and neuroticism with all forms of anxiety and a negative correlation between all forms of anxiety and self-efficacy. Especially dental anxiety is positively associated with other kinds of anxiety. In multivariate regression models only neuroticism is associated with dental anxiety, but feelings of loneliness are positively associated with with the other kinds of anxiety assessed in this study. The higher the self-efficacy, the lower the level of general anxiety.

Conclusions: In dentistry, anxiety from negative experiences with buccal interventions should be distinguished from anxiety caused by personality traits. Self-efficacy tends to protect against anxiety, while loneliness and neuroticism are direct or indirect risk factors for anxiety in this urban dentistry sample. Dental anxiety seems to be independent from biographical strains but not from neuroticism. In practice, more attention must be paid to anxiety control, self-management and efforts to improve the confidence of patients with emotional lability, less self-confidence and propensity to shame.

Untersuchung der unterschiedlichen Weise der Konfrontation mit dem eigenen Tod in Abhängigkeit mit der Nähe zum Tod anhand von spezifischen anthropologischen Dimensionen, die in einem Fragebogen operationalisiert wurden

Diese Untersuchung basiert auf einem philosophisch-anthropologischem Konstrukt und wurde nach dessen Operationalisierung in drei Promotionsarbeiten untersucht (Ursula Stabenow, Jakob Böttinger und Sarah Kramer). Die Publikation integriert alle Rohdaten in übergeordneten multivariaten Modellen, die statistisch kontrolliert die Unterschiede in vier Gruppen (junge Erwachsene, Erwachsene im mittleren Lebensalter, ältere Menschen in Altenheimen wohnend und sterbende Menschen) ermitteln.

Valdés-Stauber J, Stabenow U, Kramer S, Böttinger J, Kilian R. *Divergent patterns of confrontation with death using the Anticipated Farewell to Existence Questionnaire (AFEQT): cross-sectional comparative study of four samples with increasing proximity to death.* BMC Palliat Care 2021; 20:125.

Abstract:

Background: Based on the concept of “*Daseinsverabschiedung*”, an anthropological theory of “Anticipated Farewell to Existence” (AFE) was suggested on the basis of six grounding dimensions: selfhood, interpersonal, temporality, corporeality, worldliness, and transcendence, which are activated in a genuine manner facing death. The purpose of the study is to quantitatively compare the extent of confrontation with death between dying people in palliative care and those in other stages of life by means of the Anticipated Farewell to Existence Questionnaire” (AFEQT), based on these dimensions.

Methods: The sample (N = 485) consists of dying individuals in palliative wards and hospices (n = 121); old people living in nursing homes not suffering from a mortal disease (n = 62); young adults (n = 152), and middle-aged adults (n = 150). The design is cross-sectional and analytical. The relevance of anticipated farewell to existence was measured by means of the AFEQT. The internal consistency of the AFEQT was assessed using Cronbach’s alpha and convergent validity by means of dimensions of the Life Attitude Profile-Revised (LAP-R). Differences between groups and associations with control variables were estimated by means of multiple regression models, including propensity scores.

Results: Cronbach’s alpha for AFEQT was > 0.80 for the whole test and all subsamples, but < 0.70 for most dimensions in dying people. Correlations between each dimension and corresponding two factors was almost overall $r > 0.80$, $p < 0.001$. Good convergent validity between dimensions of AFEQT and of Life Attitude Profile-Revised in young and middle-aged participants showed correlations for superordinate indices between -0.23 and 0.72, and an overall $p < 0.001$. Dying people scored significantly higher for all dimensions, especially “altruistic preoccupation” and “reconciliation with existence” than people in other life stages ($p < 0.01$ - < 0.001). Personality traits of “openness” and “agreeableness” are

positively associated with higher scoring of AFEQT dimensions. About 77% of dying participants reported a personal benefit through the interview questions.

Conclusions: With proximity to death, the anthropological dimensions proposed scored significant higher than in other stages of life, reflecting a stronger awareness, confrontation and reconciliation with the end of their own life. These dimensions, especially preoccupation for related persons and coexistence of acceptance and struggle with death have to be taken into account in a sensitive way by supporting dialogues with dying people and their relatives.

Untersuchung der Arzt-Patient-Beziehung unter einer anthropologischen Perspektive

Diese Untersuchung geht von der Annahme aus, dass die Arzt-Patient-Beziehung wesentlich auf der anthropologischen Dimension der Interpersonalität basiert und versucht anhand historischer Beiträge und aktueller empirischer Studien ein klassisches (paternalistisch betontes) Modell der Arzt-Patient-Beziehung einem anthropologisch basierten gegenüber zu stellen. Das hier vorgeschlagene Mediatoren-Modell wäre das anthropologische Gerüst psychologischer und soziologischer Modellen der Arzt-Patient-Beziehung. Diese Untersuchung wurde über mehrere Jahre anhand von Seminaren mit Studentinnen und Studenten verfeinert und in einer Fachzeitschrift veröffentlicht.

Valdes-Stauber J. *Arzt-Patient-Beziehung: Zwischen anthropologischer Fundierung und medizinischer Praxeologie* (Physician-patient relationship: Between anthropological foundation and medical practice). *Nervenheilkunde* 2021; 40: 896-906.

Abstract

Hintergrund: Medizinisches Handeln erfolgt als sensible zwischenmenschliche Begegnung, in der die technische Leistung in einer für das Gelingen der Behandlung relevanten Arzt-Patient-Beziehung eingebettet ist.

Ziel der Untersuchung: Ausarbeitung einer anthropologischen Modellierung der „Arzt-Patient-Beziehung“ bzw. der „therapeutischen Beziehung“.

Methode: Es wird zunächst ein Standardmodell der Arzt-Patient-Beziehung vorgeschlagen. Es folgt die Formulierung von anthropologischen Annahmen zur Arzt-Patient-Beziehung. Abschließend wird ein anthropologisches Modell von befähigenden Dimensionen dieser Beziehung ausgearbeitet.

Ergebnisse: Es werden vier Bedeutungen von therapeutischer Beziehung entworfen (als Therapie bahnend, als Wirkfaktor, als in Therapie umgewandelt, als Therapie selbst) sowie sechs Begriffspaare formuliert, zwischen welchen sich die Arzt-Patient-Beziehung dialektisch bewegt. Das ausgearbeitete anthropologische Modell der Arzt-Patient-Beziehung weist formal drei Momente auf: zwischen den Merkmalen einer Arzt-Patient-Beziehung und deren in Gang gesetzten allgemeinen therapeutischen Auswirkungen kommen anthropologische Mediatoren zur Entfaltung, die den Kategorien Haltung, Interpersonalität und Kommunikation zuzuordnen sind.

Diskussion: Während das Standardmodell der Arzt-Patient-Beziehung von einer grundsätzlichen komplementären Rollenasymmetrie ausgeht, betrachtet die anthropologische Perspektive allgemein wirkende Grundkategorien wie Solidarität, Verständnis und Verständigung. Diese Beziehung ist nicht nur kollaborativ, sondern je nach Grad der Autonomie partnerschaftlich, stets aber Ausdruck des Respekts vor einer zu würdigenden fremden Existenz.

Veränderung von Sinndimensionen während einer stationären psychosomatischen Behandlung und Zusammenhang mit klinischen Veränderungen

Während die Versorgungsforschung vor allem klinische Variablen als Endpunkte zugrunde legt, berücksichtigt diese Studie eine Veränderung von wertebezogenen Einstellungen („life attitudes“) anhand eines international anerkannten validierten Fragebogens. Die Untersuchung wurde in einer internationalen Fachzeitschrift publiziert.

Valdés-Stauber J, Kämmerle H, Bachthaler S. *Change of life attitudes during inpatient psychosomatic treatment*. Journal of Humanistic Psychology 2021. DOI: 10.1177/00221678211040010.

Abstract:

Objectives: This study's primary aim was to investigate whether meaningbased attitudes to life change during inpatient psychosomatic treatment and the factors influencing the extent of this change.

Method: This prospective study ($N = 138$) was designed as a naturalistic observation. The effectiveness of treatment was investigated through pre–post comparisons of clinical variables and life attitudes (Life Attitude Profile–Revised) using bivariate tests. Factors influencing the extent of changes in life attitudes were investigated using multivariate regression models.

Results: Regarding clinical variables, a small but significant improvement in life attitudes was found, with effect sizes ranging from 0.19 to 0.58. Neuroticism correlated negatively with life attitudes at admission but not significantly with the extent of change in life attitudes. In multivariate models, the extent of the therapeutic relationship and neuroticism correlated positively with the extent of improvement in coherence and self-efficacy. The improvement in self-efficacy was associated with an improvement in life attitudes.

Discussion: Although life attitudes are robust characteristics of a person, they change during a hospital psychosomatic treatment, similar to the clinical improvement of symptoms. However, the association between the two is weak. People with stronger neuroticism experience a greater increase in life meaning during hospitalization.

Psychometrische Eigenschaften des daseinsanalytisch konzipierte Fragebogen Life Attitude profile-Revised in der deutschen Version

Um die psychometrischen Eigenschaften zu untersuchen wurden als Stichprobe stationär behandelte psychosomatisch Patienten gewählt. Insofern bezieht sich das Ergebnis primär auf diese Personengruppe. Der Test ist von Bedeutung, da Werte basierten Variablen als Ressourcen betrachtet werden können und nicht zwingend deckungsgleich mit klinisch-psychologischen oder Persönlichkeitsdimensionen auftreten.

Valdés-Stauber J, Kämmerle H, Bachthaler S. *Psychometrische Eigenschaften des LAP-R – Prüfung der deutschen Version in einem stationär-psychosomatischen Setting (Psychometric Properties of the LAP-R - Testing the German Version in a Hospital Psychosomatic Setting)*. *Psychotherapeut* 2021; 66: 147-155.

Abstract:

Hintergrund: Die allgemeine Frage nach dem „Sinn des Lebens“ wird empirisch in Form von allgemeinen und personalen Lebensbedeutungen formuliert. In der Medizin erhalten Lebensbedeutungen eine relevante Tragweite bei einem Verlust von Sinn, der als krankheitsfördernd angesehen wird, vor allem aus psychosomatischer Perspektive.

Fragestellung: Die vorliegende Studie untersucht die psychometrischen Eigenschaften der deutschsprachigen revidierten Version des Life Attitude Profile (LAP-R) von Reker für eine Stichprobe stationär-psychosomatischer Patienten sowie mögliche Assoziationen mit klinischen Outcome-Variablen.

Methode: Die Stichprobe (N = 138), von elektiv stationär-psychosomatisch behandelten Patienten wird zu den Zeitpunkten Aufnahme und Entlassung untersucht. Reliabilität im Sinne von interner Konsistenz wird mit Cronbachs Alpha ausgewertet; Konstruktvalidität wird mit konfirmatorischer Faktorenanalyse und konvergente Validität anhand von Korrelationsmatrizen mit validierten klinischen Skalen erfasst.

Ergebnisse: Die interne Konsistenz des LAP-R für die einzelnen Dimensionen zeigt α -Werte zwischen 0,69 und 0,85, für den Gesamttest beträgt α 0,92. Die konfirmatorische Faktorenanalyse zeigt ein gutes Datenfit (RMSEA, χ^2/df), aber zu geringes Modellfit (TLI, CFI). Die Korrelationen zwischen den Dimensionen des LAP-R sind meist moderat. Die Korrelation zwischen dem Ausmaß der klinischen Besserung und der Zunahme der Lebensbedeutungen ist mäßig; die Korrelation zwischen dem Ausmaß der klinischen Besserung und therapeutischer Beziehung ist hoch.

Schlussfolgerungen: Die deutsche Version des LAP-R zeigt für die Stichprobe stationär psychosomatisch behandelter Patienten gute interne Konsistenz, gute konvergente Validität, jedoch uneinheitliche Konstruktvalidität. Die übergeordneten Indices (PMI, ET) korrelieren signifikanter mit klinischen Variablen als die einzelnen Dimensionen.

Validierung eines psychometrischen Instruments zur Erfassung von Dimensionen der Interozeption anhand einer Stichprobe von stationär behandelter schwer depressiver Patienten

Die Untersuchung legt die deutsche Version des Multidimensional Assessment of Interoceptive Awareness Questionnaire (MAIA-2) und verwendet differenzierte statistische Methoden zur Prüfung der psychometrischen Eigenschaften. Die Untersuchung wurde in einer internationalen Fachzeitschrift publiziert.

Eggart M, Valdes-Stauber J. *Validation of the Multidimensional Assessment of Interoceptive Awareness (MAIA-2) Questionnaire in Hospitalized Patients with Major Depressive Disorder*. PLoS One 2021; 16(6): e0253913.

Abstract

Objectives: Interoception refers to the sensation, interpretation, and integration of internal somatic signals. Abnormalities in self-reported interoception are prevalent features of major depressive disorder (MDD) and may affect treatment outcomes. In the present study, we investigated the psychometric properties of the revised eight-dimensional and 37-item Multidimensional Assessment of Interoceptive Awareness questionnaire (the MAIA-2) in a severely depressed sample, after translating two updated scales (Not-Distracting, Not-Worrying) into German. Specifically, we examined the measure's internal consistency reliability, sensitivity to change, and minimal important differences (MID) with a focus on patient's antidepressive responses to treatment.

Methods: The study enrolled 110 participants (age: $M = 46.85$, $SD = 11.23$; female: 55.45%) undergoing hospital treatment, of whom 87 were included in the pre-post analysis. Participants completed a German translation of MAIA-2 and the Beck Depression Inventory-II (pre-/posttreatment). Internal consistency reliability was determined by Cronbach's α /McDonalds's ω , sensitivity to change was determined by effect sizes, and MIDs were determined by distribution ($0.5 * SD$) and anchor-based approaches (mean change method; ROC curve cutpoints).

Results: Depression severity reduced over the course of treatment (Median = -65.22%), and 34.48% of patients achieved remission. Reliability was appropriate for post-treatment (range of ω : .70-.90), but questionable for two pre-treatment scales (Noticing: $\omega = .64$; Not-Distracting: $\omega = .66$). The eight dimensions of MAIA-2 were sensitive to change (standardized response mean: .32-.81; Cohen's effect size: .30-.92). Distribution-based MIDs (.38-.61) and anchor based mean change MIDs (remission vs. partial response: .00-.85; partial response vs. nonresponse: .08-.88) were established on the group level. For six scales, ROC cut-points (remission: .00–1.33; response: -.20–1.00) demonstrated accurate classification to treatment response groups on the individual level.

Conclusions: This study demonstrated the applicability of the MAIA-2 questionnaire in MDD. The updated version may have led to reliability improvements regarding the revised scales, but subthreshold reliability was evident prior to treatment. The measure's dimensions were sensitive to change. MIDs were established that corresponded with antidepressive treatment outcomes. Our findings are consistent with a growing area of research which considers somatic feelings as key contributors to mental health.

Sind interozeptive Merkmale mit dem Verlauf von schweren depressiven Störungen assoziiert, sodass sie als prognostische Faktoren betrachtet werden könnten?

Nachdem die psychometrischen Eigenschaften von MAIA-2 für eine deutsche Stichprobe depressiver Patienten untersucht wurde, wandten die Autoren den Test so an, dass geprüft werden sollte, ob die abgebildeten Dimensionen einen klinischen prognostischen Wert haben könnten.

Eggart M, Valdes-Stauber J. *Can changes in multidimensional self-reported interoception be considered as outcome predictors in severely depressed patients? A moderation and mediation analysis. Journal of Psychosomatic Research 2021; DOI: 10.1016/j.jpsychores.2020.110331.*

Abstract

Objective: Somatic complaints (e.g. pain) and abnormal self-reported interoception (e.g. maladaptive bodily self-focus) are common features of major depressive disorder (MDD) with sex-specific manifestations. Whereas somatic symptoms are associated with adverse clinical outcomes (e.g. residual symptoms), studies are scarce investigating the role of interoception as an outcome predictor for specific hospital treatment of MDD. Therefore, multivariate associations between changes in multidimensional self-reported interoception, somatic symptoms, and clinical improvements are explored by hypothesizing interactions with sex and an interoceptive mechanism.

Methods: In this naturalistic study, 87 hospitalized participants suffering from MDD completed questionnaires at pre- and post-treatment assessing multidimensional self-reported interoception (MAIA-2), somatic symptom burden (SCL-90-S® SOMA), and depression severity (BDI-II). We performed a multiple hierarchical regression analysis to test for interaction effects. The mediation hypothesis was path-analytically tested in a parallel mediation model by bootstrapping confidence intervals for (in)direct effects.

Results: Improvements in self-reported interoception independently predicted positive treatment response, $\Delta R_{adj}^2=8.61\%$, $\Delta F(8, 74) = 3.23$, $p < .01$. Prediction effects were moderated by sex, $\Delta R_{adj}^2=5.54\%$, $\Delta F(8, 66) = 2.22$, $p < .05$. Post-hoc analyses revealed significant effects of body confidence in women, $B = -4.26$, $t(28) = -2.78$, $p < .01$, and of self-regulation in men, $B = -3.21$, $t(17) = -2.27$, $p < .05$. Effects of somatic symptom relief on treatment outcome were partially mediated by self-reported interoception, *total indirect* = 2.94 [95% BCa CI 0.99, 5.69].

Conclusion: Interoception patterns changed significantly and predicted outcome of hospital treatment in severely depressed patients. Our study could imply the need to consider body sensations additionally as a target for antidepressive treatments. The development of tailored interoceptive interventions in depressive patients represents a promising vision for the future.