

World Journal of *Psychiatry*

World J Psychiatr 2021 September 19; 11(9): 507-680



EDITORIAL

- 507 Future of processing and facilitating change and learning
Löffler-Stastka H, Steinmair D

REVIEW

- 517 Binge eating and psychostimulant addiction
Blanco-Gandia MC, Montagud-Romero S, Rodríguez-Arias M

MINIREVIEWS

- 530 Genetics of adult attachment: An updated review of the literature
Erkoreka L, Zumarraga M, Arrue A, Zamalloa MI, Arnaiz A, Olivas O, Moreno-Calle T, Saez E, Garcia J, Marin E, Varela N, Gonzalez-Pinto A, Basterreche N
- 543 Recent advances in the treatment of opioid use disorders—focus on long-acting buprenorphine formulations
Soyka M, Franke AG
- 553 Is there a place for cellular therapy in depression?
do Prado-Lima PAS, Costa-Ferro ZSM, Souza BSF, da Cruz IBM, Lab B
- 568 Antiglutamatergic agents for obsessive-compulsive disorder: Where are we now and what are possible future prospects?
Maraone A, Tarsitani L, Pinucci I, Pasquini M
- 581 The renin-angiotensin system, mood, and suicide: Are there associations?
Sanches M, Teixeira AL
- 589 Cognitive attentional syndrome and metacognitive beliefs as potential treatment targets for metacognitive therapy in bipolar disorder
Batmaz S, Altinoz AE, Sonkurt HO
- 605 Gastrointestinal disease in children with autism spectrum disorders: Etiology or consequence?
Krigsman A, Walker SJ

ORIGINAL ARTICLE**Observational Study**

- 619 Evaluating the emotion regulation of positive mood states among people with bipolar disorder using hierarchical clustering
Chan SHW, Yu CH, Liu KHK, Lau C, Fung AOY, Tse S

SYSTEMATIC REVIEWS

- 635 Thinking about worry: A systematic review and meta-analysis on the assessment of metacognitions in children and adolescents
Köcher LM, Schneider K, Christiansen H
- 659 Deep brain stimulation for obsessive-compulsive disorder: A systematic review of worldwide experience after 20 years
Mar-Barrutia L, Real E, Segalás C, Bertolin S, Menchón JM, Alonso P

ABOUT COVER

Peer Reviewer of *World Journal of Psychiatry*, Xin-Ke Li, PhD, Associate Professor, College of Medical Informatics, Chongqing Medical University, Chongqing 400016, China. zmdcg@126.com

AIMS AND SCOPE

The primary aim of *World Journal of Psychiatry (WJP, World J Psychiatr)* is to provide scholars and readers from various fields of psychiatry with a platform to publish high-quality basic and clinical research articles and communicate their research findings online.

WJP mainly publishes articles reporting research results and findings obtained in the field of psychiatry and covering a wide range of topics including adolescent psychiatry, biological psychiatry, child psychiatry, community psychiatry, ethnopsychology, psychoanalysis, psychosomatic medicine, etc.

INDEXING/ABSTRACTING

The *WJP* is now abstracted and indexed in Science Citation Index Expanded (SCIE, also known as SciSearch®), Current Contents/Clinical Medicine, Journal Citation Reports/Science Edition, PubMed, and PubMed Central. The 2021 edition of Journal Citation Reports® cites the 2020 impact factor (IF) for *WJP* as 4.571; IF without journal self cites: 4.429; 5-year IF: 7.697; Journal Citation Indicator: 0.73; Ranking: 46 among 156 journals in psychiatry; and Quartile category: Q2.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: *Xu Guo*; Production Department Director: *Yu-Jie Ma*; Editorial Office Director: *Jia-Ping Yan*.

NAME OF JOURNAL

World Journal of Psychiatry

ISSN

ISSN 2220-3206 (online)

LAUNCH DATE

December 31, 2011

FREQUENCY

Monthly

EDITORS-IN-CHIEF

Rajesh R Tampi

EDITORIAL BOARD MEMBERS

<https://www.wjgnet.com/2220-3206/editorialboard.htm>

PUBLICATION DATE

September 19, 2021

COPYRIGHT

© 2021 Baishideng Publishing Group Inc

INSTRUCTIONS TO AUTHORS

<https://www.wjgnet.com/bpg/gerinfo/204>

GUIDELINES FOR ETHICS DOCUMENTS

<https://www.wjgnet.com/bpg/GerInfo/287>

GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH

<https://www.wjgnet.com/bpg/gerinfo/240>

PUBLICATION ETHICS

<https://www.wjgnet.com/bpg/GerInfo/288>

PUBLICATION MISCONDUCT

<https://www.wjgnet.com/bpg/gerinfo/208>

ARTICLE PROCESSING CHARGE

<https://www.wjgnet.com/bpg/gerinfo/242>

STEPS FOR SUBMITTING MANUSCRIPTS

<https://www.wjgnet.com/bpg/GerInfo/239>

ONLINE SUBMISSION

<https://www.f6publishing.com>

Future of processing and facilitating change and learning

Henriette Löffler-Stastka, Dagmar Steinmair

ORCID number: Henriette Löffler-Stastka 0000-0001-8785-0435; Dagmar Steinmair 0000-0003-2676-9013.

Author contributions: Steinmair D and Löffler-Stastka H contributed to concept, writing, discussion, critical revision, editing, and review of the literature.

Conflict-of-interest statement: Steinmair D and Löffler-Stastka H have nothing to disclose.

Open-Access: This article is an open-access article that was selected by an in-house editor and fully peer-reviewed by external reviewers. It is distributed in accordance with the Creative Commons Attribution NonCommercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>

Manuscript source: Invited manuscript

Specialty type: Psychology

Country/Territory of origin: Austria

Peer-review report's scientific quality classification

Henriette Löffler-Stastka, Dagmar Steinmair, Department of Psychoanalysis and Psychotherapy, Medical University of Vienna, Vienna 1090, Austria

Corresponding author: Henriette Löffler-Stastka, MD, Professor, Department of Psychoanalysis and Psychotherapy, Medical University of Vienna, Währinger Gürtel 18-20, Vienna 1090, Austria. henriette.loeffler-stastka@meduniwien.ac.at

Abstract

The field of the sciences of the mind is evolving fast. With the diversification of knowledge and accumulation of data, often lacking integration and reproducibility, questions arise. The role of critical thinking and research is evident. As the science of the unconscious, psychoanalysis provides a method and theory to understand human minds and mentalities, helping the patient know his mind and transform action into reflection. Mental activities, including social skills, develop in the social context, depending on the social environment's demands and resources put onto the individual. Encoding emotional signals, markers of meaning for the individual, is ontogenetically necessary and has influences on memory encoding. Beyond theoretical understanding, implicit relational knowledge is actualized in the therapeutic setting. With a strong focus on experiencing emotional reconsolidation of memories, previous relationships' repercussions are enriched with broadening viewpoints in the analytic environment. The long-term effects of psychotherapeutic treatments have been examined. A sufficient explanation of the specific factors contributing to success or an answer when an impact is lacking is still under investigation. When investigating subliminal and implicit mechanisms leading to memory reconsolidation and the formation of functional object relations and interaction patterns, the focus is set on affective interplay and processing prior/during and after social interactions. The present paper discusses which parameters might contribute to the reshaping of memories and the linkage of memory with the emotional load of experience. Providing insights into such dynamic mental phenomena could enhance process research by investigating moment by moment interactions in psychoanalysis, treatment, and learning processes. Due to the research subject's complexity, different research methods and integration of associated research fields are required.

Key Words: Psychoanalysis; Hermeneutic circle; Evidence-based medicine; Bias; Affective interplay; Micro-process

©The Author(s) 2021. Published by Baishideng Publishing Group Inc. All rights reserved.

Grade A (Excellent): 0
Grade B (Very good): B
Grade C (Good): 0
Grade D (Fair): 0
Grade E (Poor): 0

Received: February 25, 2021

Peer-review started: February 25, 2021

First decision: April 20, 2021

Revised: April 24, 2021

Accepted: August 2, 2021

Article in press: August 2, 2021

Published online: September 19, 2021

P-Reviewer: Hosseini MS

S-Editor: Liu M

L-Editor: Filipodia

P-Editor: Ma YJ



Core Tip: The mind's ability to interact and assess the external world's reality and integrate new experiences into existing conceptions is determined by the affective load the respective interplay is assigned. Gaining a picture of the world at an acceptable reliability level requires a curious mind and openness for a discursive dispute with encountered findings.

Citation: Löffler-Stastka H, Steinmair D. Future of processing and facilitating change and learning. *World J Psychiatr* 2021; 11(9): 507-516

URL: <https://www.wjgnet.com/2220-3206/full/v11/i9/507.htm>

DOI: <https://dx.doi.org/10.5498/wjp.v11.i9.507>

INTRODUCTION

"The only true wisdom is in knowing you know nothing." – Socrates.

The illusion of certainty is constantly eroded when the amplification of questions is generated by research. Nevertheless, integrating scientific findings following an interdisciplinary approach is as challenging as inspiring, even more when dealing with a presumably still unknowable research object like the human mind. Creating a scientific dialogue dedicated to integrating balanced evidence while still constantly questioning results for their probability towards an approximation to truths requires openness to innovation. This dialogue leads to an integration of different perspectives; all concerned with overlapping research topics.

THE CIRCLE OF UNDERSTANDING

Being in the world involves acquiring experience, knowledge, and assumptions. Only from the observer's background, it is possible to enter a circle of understanding and re-experience in practice the hermeneutic circle. Developing a sense of the whole means acquiring a better sense of each part – the interpretation of findings depends on the conceptions and vice versa.

Psychodynamic theorizing and therapeutic work explore the unconscious elements not intelligible to conscious thinking but impacting our cognitive and affective abilities. Therapeutic work makes part of applied sciences to apply care based on up-to-date scientific findings continually. It contributes to research by generating a hypothesis and collecting data again, feeding back to research and quality control. "How do we know what we know" remains a sophisticated question, especially when it comes to 'implicit' and 'embodied' knowledge like social skills, relational knowledge, and interactional patterns.

Relevance to the daily routine and therapeutic work is evident as investigating mechanisms of change in this field determines patients' future options and the therapists' attitudes toward what she/he can influence. Generating meaning and giving value to one's life is something very individual and so are conceptions regarding the outcome. However, attachment to relevant others and life itself is often disturbed in mental disorders. Mental conditions confound and trouble emotional well-being and overall psychosocial functioning, with innumerable consequences on a person's path of life, catapulting them in an awkward position. Compassion fatigue marks the borders of empathy and resilience even of socially skilled and socially minded persons.

LEVELS OF EVIDENCE

To answer clinical questions and support clinical decision-making recommendations, evidence-based medicine should rely on the highest level of evidence available. Expert opinion and case reports are at the lowest level of evidence followed by case series. However, when it comes to the relevance of an individual case, this is not only determined by the incidence of the condition in question and thus by the possibility of carrying out extensive investigations (*e.g.*, in rare diseases). To follow a hypothesis-

generating approach, such study designs including qualitative methods (video- or text-analyses, interviews, *etc.*) can be of specific value and can be combined in a mixed-methods design to build a clinical theory - of course without claiming the stance of a scientific theory. Strong recommendations demand several adequately conducted randomized controlled trials and systematic reviews/meta-analyses on the research question. However, consistent evidence from lower-level studies (high-quality prospective cohort study with adequate power) and evidence from a lesser quality type of evidence with a predefined study design (*e.g.*, retrospective cohort study, a case-control study) support a strong recommendation[1]. The quality of possible findings in a meta-analysis depends on the quality of available evidence. Nevertheless, both approaches, a quantitative, natural scientific and a more qualitative, social scientific or even including the humanities, can be interesting for the research field of processing and facilitating change and learning, but we have to take the different levels of evidence into account.

Interpretation of knowledge from different levels of evidence can be challenging. However, when prioritizing information, the need for randomized controlled trials to improve evidence is relevant for psychodynamic theorizing. Confirmation[2] and publication bias[3] can only be avoided by reproduction of results in large systematic replication projects, transparency and completeness in reporting methods, data, and analysis in a scientific publication[4,5]. To avoid constructed consensus, Socrates developed the Socratic dialogue as a form of cooperative argumentative dialogue based on asking and answering questions to stimulate critical thinking[6]. Awareness of the complexity of investigations, of the questionability of truth and value of one's own opinions, leads to careful and in-depth thinking[6]. Popper's concept of critical rationalism as a method of inquiry claims that scientific theories should be criticized; a hypothesis must be subjected to tests that might falsify them[7,8]. Critical rationalists believe in progress without believing in the concept of truth in an absolute sense. However, in postmodernism, a diversity of voices is accepted as an acceptable endpoint of scientific research[8]. The human mind's ability to falsify hypotheses might be limited by its premises as its ability to generate them. Anti-positivists doubted the existence of facts. A problem-oriented, or even case-based, approach, instead of focusing on a method-oriented approach, has been claimed by both postmodernists and critical rationalists[8].

THE SCIENCE OF THE UNCONSCIOUS

In his search of the genesis of human knowledge and the role memory has in our having experience, Freud[9] concluded that plenty of human mental processes might happen unconsciously but influence behavior. In his everyday work, Freud[9] observed clinical phenomena and effects worth investigating further, thus facilitating subsequent research, with his theories also being subject to controversy. In his analysis of symptoms, he postulated that each of them makes sense when the mind's operations taking place below the conscious awareness level are considered (also compare[10]). Drives connected with basic needs (*i.e.* basic biological instincts) and societal demands posed to the individual by environments and context form human personalities, intrapsychic structures (ego, id, and super-ego), and mental abilities. Social and human science methodologists developed a multitude of research strategies, termed 'qualitative'. With Lacan[11], among other psychoanalytic theoretical developments, psychoanalytical science became a symbolization process and a way of obliterating and dissolving the phenomena of life. The imaginary realm (*e.g.*, images, shapes) is transformed in the symbolical realm of scientific experience (*e.g.*, measurement, numbers, formulae, methodological standards)[12] (Figure 1).

Contemporary views on whether research has a role in justifying and developing psychoanalytic theory and the limitations of research in this field root in a controversy with a long history[13]. Psychiatry, conceptualized as applied clinical neuroscience, had been focusing on pharmacotherapy in the 1990s. In contrast, integrating the psychoanalytic method into other psychological methods and establishing a research culture had been missed[14].

Nevertheless, clinical observations were invaluable to all known thinkers in this field. Repeated interactions with the caregiver and relevant others in early childhood shape how reality is experienced and perceived. Those affectively loaded and lived experiences result in implicit knowledge and assumptions and determine later behavior (*i.e.* patterns)[15]. That is why infant research has a long history within psychoanalysis[16-20].

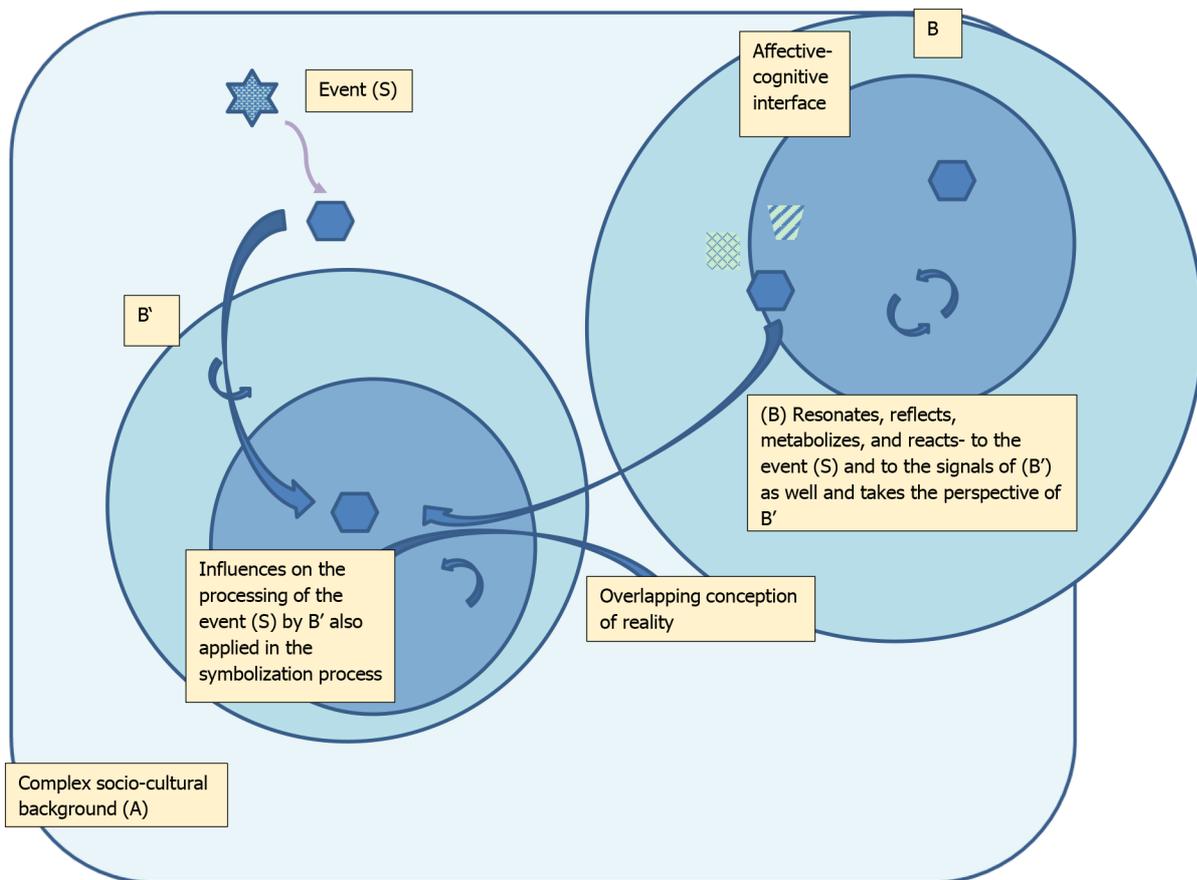


Figure 1 Symbolization process. Within a more complex sociocultural background (A), two individuals meet (B, B'). Something (S) affects them both in their (shared conception of) reality. An individual's behavior and inner states and reaction to this stimulus depend on its own symbolization abilities and experiencing. This processing evolves in tight interrelation with others and happens on a somatic and a cognitive layer. The relevant other (B) resonates, reflects, metabolizes, and reacts to the event (S) and to the signals of (B') as well and takes the perspective of B'. This reaction again influences the processing of the event (S) by B', also applied in the symbolization process.

PSYCHOTHERAPY RESEARCH

Adaptation to reality is one of the principal goals in psychoanalytic therapy, with reality as the derivation point of unconscious fantasies[9] exposed by the therapeutic work. Psychodynamic work considers subliminal signals (*i.e.* enacted through language, gesture, facial expressions) and latent perceptions of those stimuli. Importance of unconscious and embodied knowledge in the processing of such perceptions applies. Psychodynamic interventions aim at reshaping cognitive processing (*e.g.*, perception, attention, and memory)[21] by creating new viewpoints and experiences in the (analytic) environment.

Several high-quality studies reviewed in an updated meta-analysis have shown the efficacy of short-term psychodynamic therapy for depression and its equivalence with other psychotherapies[22-24]. However, several reviews with very high effect sizes had to be excluded from this analysis due to their statistical methodology. Long-term psychoanalytic therapy effectiveness is supported by evidence from systematic reviews of empirical studies[25]. Regardless of these findings, concerns about the consistency of the research methodology have been raised. Due to the lack of meta-analyses reviewing robust, high-quality data, high-level evidence is missing[25]. Overall, identifying predictors for long-term effects would help yield hope for individual patients and allocate treatments. Nowadays, health care providers demand the highest achievable evidence when deciding upon the allocation of resources. When confronting the efficacy of cognitive-behavioral therapy and psychodynamic therapy in treating major depression, the two methods applied in the randomized controlled trials showed no significant differences but were equally effective[23]. However, when long-lasting effects (3 years) were investigated, psychoanalytic therapy was better, possibly due to a dose effect[26]. Additionally, mediators predicting treatment success specific for each treatment method have been proposed[27-31]. Investigating dreams and patients' fantasies and focusing on memories or reconstructions of childhood were

found to explain some of the differences between the two methods.

When creating common ground in psychotherapy research, this involves many therapeutic approaches, claiming to have the recipe for healing the human psyche. One of the characteristic traits of humans, most probably distinguishing them from other primates, is their ability to form societies and carry on negotiations between different groups within individual societies and at an international level. The ability to hypothesize and adopt different perspectives to understand other viewpoints (*i.e.* mentalizing) is necessary.

As to psychotherapy research, given that many different approaches lead to improved symptoms, common factor models (including alliance, empathy[32], attitude [33], expectations, cultural adaptation, and therapist differences)[34-36] have been proposed, including the clients' contributions[37]. Essential skills for all psychotherapists are relationship skills, attachment, and emotional intelligence abilities. For psychodynamic therapy, technical neutrality was found to correlate with success[38].

INTEGRATION OF KNOWLEDGE

Nowadays, embedding psychodynamic thinking with an evidence-based approach aims at integrating different kinds of research, looking at cognitive processes from different perspectives.

The constant questioning of "truths" leads to openness to innovations and engagement with associated research fields (*e.g.*, neuropsychology, neurosciences, communication-sciences). As outlined above, a mixed-method approach is necessary when generating evidence in a real-world scenario. The choice of the method depends on the research question, but independent of the method considered, quality depends on preventing bias (*e.g.*, recall bias, selection bias, observation bias, confirmation bias, and publishing bias). As mentioned above, the approach should be a problem-solving one. Collaboration, support (*e.g.*, methodological support, guidelines), peer review, and open science reforms call for openness in the scientific discourse[39].

Developing substantial research questions requires excellent knowledge of the investigated research topic and the problem identified. The uncertainty and complexity of knowledge and parties involved limit the academic debate, and already the possible questions impact answers. Thus, integrating new theories and strains of expertise and strategies in existing frameworks and dynamic systems (*e.g.*, *via* a public/patient involving design) requires an adequate understanding of the system, influencing factors, and a generalization across its states and the ones of the observing unit/system. This integration of findings might be challenging and time-consuming [40]. Scientific theorizing involves acknowledging uncertainty and expressing the limitation of results.

Applying this to the example of research in emotion and behavior will demonstrate the rise of a new research field by integrating different approaches and awareness of limitations in research. Emotion has been a mainstream topic in the last decades[41]. Psychoanalysts and neuropsychologists have equally been interested in understanding emotional processes. The interest in this research field is understandable because of the influence emotion has on cognitive abilities. This impact is especially true in directing an individual's attention, perception of reality, motivation, and memory[42]. Human emotions determine how an individual uses its resources, and they have importance not only when triggered by internal stimuli but also when interacting with external triggers (compare, *e.g.*, mentalization based therapy)[43].

Generation of meaning is bound to the interplay between individual and (social) environment under specific conditions and frames memory traces. Each selection between different action options (and thoughts) influences subsequent decisions. When relying on experience, actualization is facilitated if adaptation to the current environment is perceived as sufficient. Implicit bias refers to unconscious assumptions, categories, and attitudes influencing our perception and appraisal[42]. Cognitive bias enables fast cognitive processing and roots in evolutionary advantage arising from this stereotype judgment, with evident affective influences.

The world of science seeks to study phenomena through observation and experiment. The impact of the flexibility of analytical approaches was investigated recently for the field of neuroimaging: the analysis of a single neuroimaging dataset by many teams showed substantial variability despite significant consensus in activated regions [42]. The authors stress the importance of validating complex workflows and analyzing data[42] through different research teams, taking into account implicit bias. Also, for the field of explainable artificial intelligence, a paradigm shift has been

suggested to avoid confirmation bias and increase transparency and validity[44].

Emotion theories from various research fields were concerned with components of emotional processes. Emotions include preceding mental and bodily states, appraisal and consequences like consciousness, generation of symbolic meaning, and/or enactment *via* behavior. The importance of process in addition to outcome research has been emphasized. Looking at micro processes prior/during and after social interactions makes sense in emotion research as emotional reactions arise during interactions with others and are perceived and regulated moment by moment[45-47].

As the science of the unconscious, psychoanalysis investigates human minds and mentality, aiming to provide an environment for the transformation of enactment into reflection, preventing recurring patterns if identified as destructive or harmful[48]. This process of adaptation occurs in the individual as well as in society. However, how does this happen? An “analytic environment” provides an actualization of memories and related implicit and unconscious knowledge and affective linkages. The psychoanalytic method aims at broadening the field of experience and perception. Providing a revalidation and reinterpretation of existing viewpoints leads to freedom of thought and action and reshaping memories or appraisal. Integration of so far indigestible contents in a more favorable narrative leads to a changed perception of reality and perspectives. The focus is on the affective interplay and processing in the actualized situation, thus demanding time to analyze ongoing interactions[47,49]. Leading affects in the early dyadic interplays directly affect conceptions of the self. A child’s internal abilities to cope with reality depend on whether specific representational structures (self, others, relationships) have been created in the early interactions[50,51]. Interactional patterns are socially transmittable, and their modification is challenging.

Psychotherapy research is concerned with process and outcome investigation of how specific factors contribute to therapy success or alliance rupture and failure. Observational research often assumes that behavior is more or less proving of mental and affective states. However, modifiers and moderators must be considered when aiming at attributing results to specific therapeutic interventions. For mice, facial expressions have been linked to emotional states and their neuronal correlates[50,52]. While in the mouse model and under laboratory circumstances, this might be more straightforward, generalization to real-life scenarios requires caution when interpreting findings.

When it comes to investigating persons with disturbances or diseases of their mental health, their vulnerability[53] must be acknowledged in therapy as well as when conceptualizing research[54,55] (1949 Nuremberg Code, updated in the 2008 World Medical Association Declaration of Helsinki, and in the 1979 Belmont Report). On the other hand, excluding persons only because they belong to vulnerable groups has been discussed as equally unethical and contributing to research bias[56,57]. Each case must be considered, especially when dealing with persons with (temporarily, fluctuating, or permanently) impaired mental state. In psychoanalytic therapy, investigation of therapy dropouts revealed that multiple factors contribute to the decision to continue or to dismiss treatments. Goals, readiness to change, awareness and insight capacity, resistance, and transference are well-known factors[55]. However, when Lacan[57] attempts to conceptualize psychoanalytical ethics, he places the problem of desire at the center of his ethics[56]. “At every moment we need to know what our effective relationship is to the desire to do good, to the desire to cure.” Lacan[57] keeps reminding us that the sphere of human subjectivity, including unconscious fantasies, is a dimension the analyst cannot pretend to know. Lacan[57] emphasizes that not only the patients’ unconscious wishes are present, but also the analyst’s own desires. Acknowledging this is the starting point in preventing the psychoanalyst’s application of personal reality and desire as a normative ideology to the patient[58]. This includes “hidden agendas of economic power and status” and morality[56].

Self-related processing, the wish to be the agent of one’s actions in the world, and orientation towards relevant others (*i.e.* innate attachment motive) through repetitive interactional interplay leads to creating social bonds as to the human’s impact on the environment. Interactive resonance contributes to attachment formation with relevant others[46]. Medical knowledge integration is ambitious due to the heterogenous field involving biological, behavioral, and social sciences providing data (bottom-up)[59]. Top-down organismic systems medicine has been proposed as an integrative approach [40].

When merging psychoanalytical with neuroscientific conceptions, both assume that major adaptations and developments related to cognitive abilities merely take place in the first decades of life. This goes in hand with current attempts to detect and treat vulnerable subjects already early in their life to prevent mental disorders later on[37]. Following systems theory, a rather integrative approach, and complex systems can

only be understood in their context, influencing each other[60] through a web of connections depending on their complexity.

Subliminal affective reactions can be hints for targeting specific interventions[61-63]. The ability to infer mental and affective states evolves early in life, but different interpersonal and arousal contexts influence available strategies[64]. When dealing with a subject's memories, this is supposed to be emotionally challenging because only subjectively valuable content is stored. However, when experiences are overwhelming, accessibility of memory content might be reduced. Containment also depends on the attitudes and competencies of the containing person[33,48]. Memories are not unchangeable. However, defense against arbitrary manipulation is adaptive and intelligible due to obvious reasons. Psychodynamic therapies aim to explore and interpret internal conflicts to assist people when earlier experiences influence a destructive and distorting way on present options[63].

Providing an opportunity to model oneself by reconsidering our mind, various core factors apply. This remodeling would imply a reconceptualization of the self and others and the relationships between them and anchoring this process in the embodied self[64]. When interacting with the world, self-representations and world-representations are actualized. Hence, psychotherapy constitutes a setting where this process is supposed to happen in a sphere of expanded subjectivity (involving the therapist), considering rational aspects and experiencing[19,40,46].

CONCLUSION

In conclusion, integrating relevant findings into psychoanalytic theories requires a top-down approach (*i.e.* a meta-theory) constantly metabolizing up-to-date empirical evidence. Thus, differentiation of knowledge about mental conditions evolves dynamically in a sphere of unification of multiple features contributing to the whole, also very subjective contributions to the topic of facilitating change.

Almost any phenomenon can be studied qualitatively and quantitatively. However, applied techniques determine results, and choosing the adequate research method according to the scope and research question is critical for gaining an in-depth picture of the addressed topic.

ACKNOWLEDGEMENTS

We thank the reviewers for comments that significantly improved the final version of the manuscript.

REFERENCES

- 1 **Burns PB**, Rohrich RJ, Chung KC. The levels of evidence and their role in evidence-based medicine. *Plast Reconstr Surg* 2011; **128**: 305-310 [PMID: [21701348](#) DOI: [10.1097/PRS.0b013e318219c171](#)]
- 2 **Begley CG**, Ellis LM. Drug development: Raise standards for preclinical cancer research. *Nature* 2012; **483**: 531-533 [PMID: [22460880](#) DOI: [10.1038/483531a](#)]
- 3 **Fanelli D**. Do pressures to publish increase scientists' bias? *PLoS One* 2010; **5**: e10271 [PMID: [20422014](#) DOI: [10.1371/journal.pone.0010271](#)]
- 4 **Bakker M**, Wicherts JM. The (mis)reporting of statistical results in psychology journals. *Behav Res Methods* 2011; **43**: 666-678 [PMID: [21494917](#) DOI: [10.3758/s13428-011-0089-5](#)]
- 5 **Nuijten MB**, Hartgerink CH, van Assen MA, Epskamp S, Wicherts JM. The prevalence of statistical reporting errors in psychology (1985-2013). *Behav Res Methods* 2016; **48**: 1205-1226 [PMID: [26497820](#) DOI: [10.3758/s13428-015-0664-2](#)]
- 6 **van Rossem K**. Meeting Socrates. How to do Socratic consultations. *Philos Pract: J APPA* 2014; **9**: 1344-1351
- 7 **Compston A**. From the Archives Muscular atrophy, after measles, in three members of a family. By J.A. Ormerod, M.D. *Brain* (October) 1884; **7** (part XXVII): 334-342; with The peroneal type of progressive muscular atrophy. By Howard H. Tooth, M.A., M.D., M.R.C.P (H.K Lewis, London). 1886; pages 44: with Critical Digests. Recent observations on progressive muscular atrophy. By H. H. Tooth, M.D. *Brain* (July) 1887; **10** (part XXXVIII): 243-253; with The peroneal form or leg-type of progressive muscular atrophy. By B. Sachs, M.D. (New York). Professor of Mental and Nervous Diseases in the New York Polyclinic, *Brain* 1890; **12**: 447-459. *Brain* 2019; **142**: 2538-2543 [PMID: [31292617](#) DOI: [10.1093/brain/awz200](#)]
- 8 **Holtz P**. Does Postmodernism Really Entail a Disregard for the Truth? *Front Psychol* 2020; **11**:

- 545959 [PMID: 33041913 DOI: 10.3389/fpsyg.2020.545959]
- 9 **Freud S.** Das Ich und das Es. GW XIII, Frankfurt am Main: S. Fischer Verlag, 1923: 237-289
 - 10 **Hevesi Z, Zelena D, Romanov RA, Hanics J, Ignác A, Zambon A, Pollak DD, Lendvai D, Schlett K, Palkovits M, Harkany T, Hökfelt TGM, Alpár A.** Secretagogin marks amygdaloid PKC δ interneurons and modulates NMDA receptor availability. *Proc Natl Acad Sci U S A* 2021; **118**: e1921123118 [PMID: 33558223 DOI: 10.1073/pnas.1921123118]
 - 11 **Lacan J.** Symbol and imaginary (Seminar II: session 22nd June 1955: part 4). In: Blonsky M, editor. Baltimore MD: The Johns Hopkins University Press, 1985: 206-209
 - 12 **Zwart H.** Conceptual and methodological framework: Lacanian psychoanalysis. In: Tales of research misconduct. Library of ethics and applied philosophy. Springer: Cham, 2017: 25-55 [DOI: 10.1007/978-3-319-65554-3_2]
 - 13 **Davies R, Sandler A-M, Sandler J.** Clinical and observational psychoanalytic research: roots of a controversy - Andre Green & Daniel Stern. 1st ed. London: Routledge, 2000: 1-184
 - 14 **Paris J.** An evidence-based critique of contemporary Psychoanalysis. Research, theory, and clinical practice. 1st ed. London, UK: Routledge, 2019: i-174
 - 15 **Balint M.** Die drei seelischen Bereiche. *Psyche Z Psychoanaly* 1957; **11**: 321-344
 - 16 **Sherwin-White S.** Melanie Klein and infant observation. *Infant Observation* 2017; **20**: 5-26 [DOI: 10.1080/13698036.2017.1311235]
 - 17 **Dix M.** Beziehungserfahrungen und Fantasietätigkeit von Säuglingen in den Theorien von Melanie Klein und Daniel Stern. *Forum Psychoanal* 2017; **33** [DOI: 10.1007/s00451-017-0274-y]
 - 18 **Brierley M.** Affects in theory and practice. *Int J Psycho-Anal* 1937; **18**: 256-268
 - 19 **Fonagy P, Gergely G, Jurist EL, Target M.** Affect regulation, mentalization, and the development of the self. New York: Other Press, 2002: 1-592
 - 20 **Bowlby J.** A secure base: Clinical applications of attachment theory. 1st ed. London: Routledge, 2005: 1-225
 - 21 **Freud S.** Entwurf einer Psychologie. 1950 [cited 10 January 2021]. Available from: <https://www.semanticscholar.org/paper/Entwurf-einer-Psychologie-Freud/48bfc3c82b7384f61bd25b8611046eabd7ee6139>
 - 22 **Driessen E, Hegelmaier LM, Abbass AA, Barber JP, Dekker JJ, Van HL, Jansma EP, Cuijpers P.** The efficacy of short-term psychodynamic psychotherapy for depression: A meta-analysis update. *Clin Psychol Rev* 2015; **42**: 1-15 [PMID: 26281018 DOI: 10.1016/j.cpr.2015.07.004]
 - 23 **Driessen E, Van HL, Don FJ, Peen J, Kool S, Westra D, Hendriksen M, Schoevers RA, Cuijpers P, Twisk JW, Dekker JJ.** The efficacy of cognitive-behavioral therapy and psychodynamic therapy in the outpatient treatment of major depression: a randomized clinical trial. *Am J Psychiatry* 2013; **170**: 1041-1050 [PMID: 24030613 DOI: 10.1176/appi.ajp.2013.12070899]
 - 24 **Shedler J.** The efficacy of psychodynamic psychotherapy. *Am Psychol* 2010; **65**: 98-109 [PMID: 20141265 DOI: 10.1037/a0018378]
 - 25 **de Maat S, de Jonghe F, de Kraker R, Leichsenring F, Abbass A, Luyten P, Barber JP, Rien Van, Dekker J.** The current state of the empirical evidence for psychoanalysis: a meta-analytic approach. *Harv Rev Psychiatry* 2013; **21**: 107-137 [PMID: 23660968 DOI: 10.1097/HRP.0b013e318294f5fd]
 - 26 **Huber D, Zimmermann J, Henrich G, Klug G.** Comparison of cognitive-behaviour therapy with psychoanalytic and psychodynamic therapy for depressed patients - a three-year follow-up study. *Z Psychosom Med Psychother* 2012; **58**: 299-316 [PMID: 22987495 DOI: 10.13109/zptm.2012.58.3.299]
 - 27 **Brown J.** Specific Techniques Vs. Common Factors? *Am J Psychother* 2015; **69**: 301-316 [PMID: 26414311 DOI: 10.1176/appi.psychotherapy.2015.69.3.301]
 - 28 **Taurke EA, Flegenheimer W, McCullough L, Winston A, Pollack J, Trujillo M.** Change in patient affect/defense ratio from early to late sessions in brief psychotherapy. *J Clin Psychol* 1990; **46**: 657-656 [PMID: 2246376 DOI: 10.1002/1097-4679(199009)46:5<657::aid-jclp2270460519>3.0.co;2-g]
 - 29 **McCullough ME, Worthington EL Jr, Rachal KC.** Interpersonal forgiving in close relationships. *J Pers Soc Psychol* 1997; **73**: 321-336 [PMID: 9248052 DOI: 10.1037//0022-3514.73.2.321]
 - 30 **Winston RB.** Student housing and residential life: A handbook for professionals committed to student development goals. The Jossey-Bass higher and adult education series. San Francisco: Jossey-Bass, Inc., 1993: 1-628
 - 31 **Høglend P, Hersoug AG, Bøgdal KP, Amlø S, Marble A, Sørbye Ø, Røssberg JI, Ulberg R, Gabbard GO, Crits-Christoph P.** Effects of transference work in the context of therapeutic alliance and quality of object relations. *J Consult Clin Psychol* 2011; **79**: 697-706 [PMID: 21859184 DOI: 10.1037/a0024863]
 - 32 **Schmidsberger F, Löffler-Stastka H.** Empathy is proprioceptive: the bodily fundament of empathy - a philosophical contribution to medical education. *BMC Med Educ* 2018; **18**: 69 [PMID: 29622015 DOI: 10.1186/s12909-018-1161-y]
 - 33 **Pastner B, Schechtner C, Billeth S, Preusche I, Alexopoulos J, Löffler-Stastka H.** Development of therapeutic attitudes: Teaching and learning in psychotherapy. *Procedia - Social and Behav Sci* 2014; **116**: 1170-1175 [DOI: 10.1016/j.sbspro.2014.01.364]
 - 34 **Wampold BE.** How important are the common factors in psychotherapy? *World Psychiatry* 2015; **14**: 270-277 [PMID: 26407772 DOI: 10.1002/wps.20238]
 - 35 **Lambert MJ.** Prevention of treatment failure: The use of measuring, monitoring, and feedback in clinical practice. Washington, DC: APA, 2010 [DOI: 10.1037/12141-000]

- 36 **Drisko J.** The common factors model: Its place in clinical practice and research. *Smith Coll Stud Soc* 2013; **83**: 398-413 [DOI: [10.1080/00377317.2013.833435](https://doi.org/10.1080/00377317.2013.833435)]
- 37 **Eversmann J, Schöttke H, Wiedl KH, Rogner J.** Die Beobachtungsskala „Therapie-relevante interpersonelle Verhaltensweisen“ (TRIB) in der Auswahl von Teilnehmern der Psychotherapieausbildung. *Z Klin Psychol Psychother: Forschung und Praxis* 2011; **40**: 11-21 [DOI: [10.1026/1616-3443/a000062](https://doi.org/10.1026/1616-3443/a000062)]
- 38 **McDonald S.** Emotions Are Rising: The Growing Field of Affect Neuropsychology. *J Int Neuropsychol Soc* 2017; **23**: 719-731 [PMID: [29198275](https://pubmed.ncbi.nlm.nih.gov/29198275/) DOI: [10.1017/S1355617717000844](https://doi.org/10.1017/S1355617717000844)]
- 39 **Fidler F, Wilcox J.** Reproducibility of scientific results. [cited 22 April 2021]. In: Stanford Encyclopedia of Philosophy [Internet]. Available from: <https://plato.stanford.edu/entries/scientific-reproducibility/>
- 40 **Tretter F, Löffler-Stastka H.** Medical knowledge integration and "systems medicine": Needs, ambitions, limitations and options. *Med Hypotheses* 2019; **133**: 109386 [PMID: [31541780](https://pubmed.ncbi.nlm.nih.gov/31541780/) DOI: [10.1016/j.mehy.2019.109386](https://doi.org/10.1016/j.mehy.2019.109386)]
- 41 **Tyng CM, Amin HU, Saad MNM, Malik AS.** The Influences of Emotion on Learning and Memory. *Front Psychol* 2017; **8**: 1454 [PMID: [28883804](https://pubmed.ncbi.nlm.nih.gov/28883804/) DOI: [10.3389/fpsyg.2017.01454](https://doi.org/10.3389/fpsyg.2017.01454)]
- 42 **Botvinik-Nezer R, Holzmeister F, Camerer CF, Dreber A, Huber J, Johannesson M, Kirchler M, Iwanir R, Mumford JA, Adcock RA, Avesani P, Baczkowski BM, Bajracharya A, Bakst L, Ball S, Barilari M, Bault N, Beaton D, Beitner J, Benoit RG, Berkers RMWJ, Bhanji JP, Biswal BB, Bobadilla-Suarez S, Bortolini T, Bottenhorn KL, Bowring A, Braem S, Brooks HR, Brudner EG, Calderon CB, Camilleri JA, Castellon JJ, Cecchetti L, Cieslik EC, Cole ZJ, Collignon O, Cox RW, Cunningham WA, Czoschke S, Dadi K, Davis CP, Luca A, Delgado MR, Demetriou L, Dennison JB, Di X, Dickie EW, Dobryakova E, Donnat CL, Dukart J, Duncan NW, Durnez J, Eed A, Eickhoff SB, Erhart A, Fontanesi L, Fricke GM, Fu S, Galván A, Gau R, Genon S, Glatard T, Glerean E, Goeman JJ, Golwin SAE, González-García C, Gorgolewski KJ, Grady CL, Green MA, Guassi Moreira JF, Guest O, Hakimi S, Hamilton JP, Hancock R, Handjaras G, Harry BB, Hawco C, Herholz P, Herman G, Heunis S, Hoffstaedter F, Hogeveen J, Holmes S, Hu CP, Huettel SA, Hughes ME, Iacovella V, Jordan AD, Isager PM, Isik AI, Jahn A, Johnson MR, Johnstone T, Joseph MJE, Juliano AC, Kable JW, Kassinopoulos M, Koba C, Kong XZ, Kosciuk TR, Kucukboyaci NE, Kuhl BA, Kupek S, Laird AR, Lamm C, Langner R, Lauharatanahirun N, Lee H, Lee S, Leemans A, Leo A, Lesage E, Li F, Li MYC, Lim PC, Lintz EN, Liphardt SW, Losecaat Vermeer AB, Love BC, Mack ML, Malpica N, Marins T, Maumet C, McDonald K, McGuire JT, Melero H, Méndez Leal AS, Meyer B, Meyer KN, Mihai G, Mitsis GD, Moll J, Nielson DM, Nilsson G, Notter MP, Olivetti E, Onicas AI, Papale P, Patil KR, Peelle JE, Pérez A, Pischella D, Poline JB, Prystauka Y, Ray S, Reuter-Lorenz PA, Reynolds RC, Ricciardi E, Rieck JR, Rodriguez-Thompson AM, Romyn A, Salo T, Samanez-Larkin GR, Sanz-Morales E, Schlichting ML, Schultz DH, Shen Q, Sheridan MA, Silvers JA, Skagerlund K, Smith A, Smith DV, Sokol-Hessner P, Steinkamp SR, Tashjian SM, Thirion B, Thorp JN, Tinghög G, Tisdall L, Tompson SH, Toro-Serey C, Torre Tresols JJ, Tozzi L, Truong V, Turella L, van 't Veer AE, Verguts T, Vettel JM, Vijayarajah S, Vo K, Wall MB, Weeda WD, Weis S, White DJ, Wisniewski D, Xifra-Porxas A, Yearling EA, Yoon S, Yuan R, Yuen KSL, Zhang L, Zhang X, Zosky JE, Nichols TE, Poldrack RA, Schonberg T. Variability in the analysis of a single neuroimaging dataset by many teams. *Nature* 2020; **582**: 84-88 [PMID: [32483374](https://pubmed.ncbi.nlm.nih.gov/32483374/) DOI: [10.1038/s41586-020-2314-9](https://doi.org/10.1038/s41586-020-2314-9)]**
- 43 **Bateman A, Fonagy P.** Mentalization-Based Treatment. *Psychoanal Inq* 2013; **33**: 595-613 [PMID: [26157198](https://pubmed.ncbi.nlm.nih.gov/26157198/) DOI: [10.1080/07351690.2013.835170](https://doi.org/10.1080/07351690.2013.835170)]
- 44 **Rosenfeld A.** Better metrics for evaluating explainable artificial intelligence. In: AAMAS '21: Proceedings of the 20th International Conference on Autonomous Agents and Multi Agent Systems. Richland: International Foundation for Autonomous Agents and Multiagent Systems, 2021: 45-50
- 45 **Anstadt T, Merten J, Ullrich B, Krause R.** Affective dyadic behavior, core conflictual relationship themes, and success of treatment. *Psychother Res* 1997; **7**: 397-417 [DOI: [10.1080/10503309712331332103](https://doi.org/10.1080/10503309712331332103)]
- 46 **Krause R.** The development of different selves on the basis of leading maternal affects: Metatheoretical, clinical and technical reflections. *Int Forum Psychoanal* 2020; **30**: 22-23 [DOI: [10.1080/0803706x.2020.1749300](https://doi.org/10.1080/0803706x.2020.1749300)]
- 47 **Datz F, Wong G, Löffler-Stastka H.** Interpretation and Working through Contemptuous Facial Micro-Expressions Benefits the Patient-Therapist Relationship. *Int J Environ Res Public Health* 2019; **16**: 4901 [PMID: [31817282](https://pubmed.ncbi.nlm.nih.gov/31817282/) DOI: [10.3390/ijerph16244901](https://doi.org/10.3390/ijerph16244901)]
- 48 **Steinmair D, Richter F, Löffler-Stastka AH.** Relationship between Mentalizing and Working Conditions in Health Care. *Int J Environ Res Public Health* 2020; **17**: 2420 [PMID: [32252375](https://pubmed.ncbi.nlm.nih.gov/32252375/) DOI: [10.3390/ijerph17072420](https://doi.org/10.3390/ijerph17072420)]
- 49 **Fonagy P, Campbell C.** Future directions in personality pathology. *Curr Opin Psychol* 2021; **37**: 145-151 [PMID: [33571731](https://pubmed.ncbi.nlm.nih.gov/33571731/) DOI: [10.1016/j.copsyc.2021.01.001](https://doi.org/10.1016/j.copsyc.2021.01.001)]
- 50 **Dolensek N, Gehrlach DA, Klein AS, Gogolla N.** Facial expressions of emotion states and their neuronal correlates in mice. *Science* 2020; **368**: 89-94 [PMID: [32241948](https://pubmed.ncbi.nlm.nih.gov/32241948/) DOI: [10.1126/science.aaz9468](https://doi.org/10.1126/science.aaz9468)]
- 51 **Klein M.** Love, guilt, and reparation and other works. In: The writings of Melanie Klein. 1st ed. London: Hogarth Press, 1975
- 52 **Moccia L, Mazza M, Di Nicola M, Janiri L.** The Experience of Pleasure: A Perspective Between Neuroscience and Psychoanalysis. *Front Hum Neurosci* 2018; **12**: 359 [PMID: [30233347](https://pubmed.ncbi.nlm.nih.gov/30233347/) DOI: [10.3389/fnhum.2018.00359](https://doi.org/10.3389/fnhum.2018.00359)]

- 10.3389/fnhum.2018.00359]
- 53 **Milic B**, Feller C, Schneider M, Debbané M, Löffler-Stastka H. Social cognition in individuals with 22q11 deletion syndrome linked to psychopathology and social outcomes: A review. *BMC Psychiatry* 2021 [DOI: [10.1186/s12888-020-02975-5](https://doi.org/10.1186/s12888-020-02975-5)]
 - 54 **Novaes MRCG**, Rodrigues CS, Guilhem DB. Scientific integrity and copyright in codes of professional ethics. *Rev Bioét* 2018; **26**: 387-96 [DOI: [10.1590/1983-80422018263258](https://doi.org/10.1590/1983-80422018263258)]
 - 55 **González-Duarte A**, Zambrano-González E, Medina-Franco H, Alberú-Gómez J, Durand-Carbajal M, Hinojosa CA, Aguilar-Salinas CA, Kaufer-Horwitz M. II. The research ethics involving vulnerable groups. *Rev Invest Clin* 2019; **71**: 217-225 [PMID: [31448777](https://pubmed.ncbi.nlm.nih.gov/31448777/) DOI: [10.24875/RIC.19002812](https://doi.org/10.24875/RIC.19002812)]
 - 56 **Kirshner LA**. Toward an ethics of psychoanalysis: a critical reading of Lacan's ethics. *J Am Psychoanal Assoc* 2012; **60**: 1223-1242 [PMID: [23118239](https://pubmed.ncbi.nlm.nih.gov/23118239/) DOI: [10.1177/0003065112457876](https://doi.org/10.1177/0003065112457876)]
 - 57 **Lacan J**. The Seminar of Jacques Lacan Book VII. In: The ethics of Psychoanalysis. 1st ed. Miller JA, editor. London, UK: Routledge; 1992: i-352
 - 58 **Bion WR**. Notes on memory and desire. *Psychoanalytic Forum* 1967; **2**: 272-280
 - 59 **Camilleri N**, Chiarenza GA, Cosmiou A, Debbané M, Garcia-Lopez LJ, Gergov V, Girini K, Hochgerner M, Löffler-Stastka H, Markovska-Simoska S, Milic B, Podina IR, Poulsen S, Prevendar T, Sacco R, Saliba A, Saliba E, Torres S, Tulbure BT, Ulberg R, Fondacaro DV, Voursoura E. Predictors and moderators of psychotherapy outcome for mental disorders in young people: Protocol for a systematic review. PROSPERO 2020 CRD42020166756. [cited 10 January 2021]. In: National Institute for Health Research [Internet]. Available from: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42020166756
 - 60 **McFarquhar T**, Luyten P, Fonagy P. Changes in interpersonal problems in the psychotherapeutic treatment of depression as measured by the Inventory of Interpersonal Problems: A systematic review and meta-analysis. *J Affect Disord* 2018; **226**: 108-123 [PMID: [28968563](https://pubmed.ncbi.nlm.nih.gov/28968563/) DOI: [10.1016/j.jad.2017.09.036](https://doi.org/10.1016/j.jad.2017.09.036)]
 - 61 **van Leeuwen WA**, van Wingen GA, Luyten P, Denys D, van Marle HJF. Attachment in OCD: A meta-analysis. *J Anxiety Disord* 2020; **70**: 102187 [PMID: [31951931](https://pubmed.ncbi.nlm.nih.gov/31951931/) DOI: [10.1016/j.janxdis.2020.102187](https://doi.org/10.1016/j.janxdis.2020.102187)]
 - 62 **Luyten P**, Campbell C, Allison E, Fonagy P. The Mentalizing Approach to Psychopathology: State of the Art and Future Directions. *Annu Rev Clin Psychol* 2020; **16**: 297-325 [PMID: [32023093](https://pubmed.ncbi.nlm.nih.gov/32023093/) DOI: [10.1146/annurev-clinpsy-071919-015355](https://doi.org/10.1146/annurev-clinpsy-071919-015355)]
 - 63 **Thabrew H**, Stasiak K, Hetrick SE, Donkin L, Huss JH, Highlander A, Wong S, Merry SN. Psychological therapies for anxiety and depression in children and adolescents with long-term physical conditions. *Cochrane Database Syst Rev* 2018; **12**: CD012488 [PMID: [30578633](https://pubmed.ncbi.nlm.nih.gov/30578633/) DOI: [10.1002/14651858.CD012488.pub2](https://doi.org/10.1002/14651858.CD012488.pub2)]
 - 64 **Newen A**. The Embodied Self, the Pattern Theory of Self, and the Predictive Mind. *Front Psychol* 2018; **9**: 2270 [PMID: [30532721](https://pubmed.ncbi.nlm.nih.gov/30532721/) DOI: [10.3389/fpsyg.2018.02270](https://doi.org/10.3389/fpsyg.2018.02270)]



Published by **Baishideng Publishing Group Inc**
7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-3991568
E-mail: bpgoffice@wjgnet.com
Help Desk: <https://www.f6publishing.com/helpdesk>
<https://www.wjgnet.com>

