TRACKING THERAPY OUTCOMES

NEW DIGITAL and AI TOOLS FOR PSYCHOLOGISTS

Presenter: **Duane Smith** (M.Psych, MAPS, FCCP)

Registered and Endorsed Counselling Psychologist

PsyBA Approved Trainer





TOPICS TODAY

Current research of what works in psychotherapy and what are the ingredients in the "magic' of psychotherapy

and

New best practice AI and digital tools for tracking your client/therapy outcomes, improving your practice and reducing administration burden

30,000 hours

Why did I become a psychologist?

Was I any good at it? Could I have been better?

What did I do that went beyond my training that allowed me to connect with others and their experiences and narratives that allowed a collaborative co-creation of meaning to their lives and positive change beyond symptom reduction?

The power of storytelling and being witness to our clien'ts story of struggle and pain.

WHY DO WE NEED TO KNOW?

Am I doing as well as I could be?
Imposter Syndrome and Personal Bias..

Increased pressure from government and funding bodies to justify and validate our outcomes as psychologists

Other professions are also coming into the mental health space

Reflective and deliberate practice is a new benchmark core competency in the new PsyBA general competencies

Self Assessment Bias

"Therapists tend to

over-predict improvement and fail to recognize clients who worsen during treatment"

Hannan Et al., (2005)

"Therapists overestimate their rates of client improvement and underestimate their deterioration rates" (Walfish, McAlister, O'Donnell, and Lambert, 2012)

"Least effective therapists rate themselves as the most effective cohort" (Brown, Dreis, & Nace, 1999; Hiatt & Hargrave, 1995)

"Therapists believe that 85% of clients recover from therapy and 90% of therapists believed they were above the 75% ile compared to other therapists"

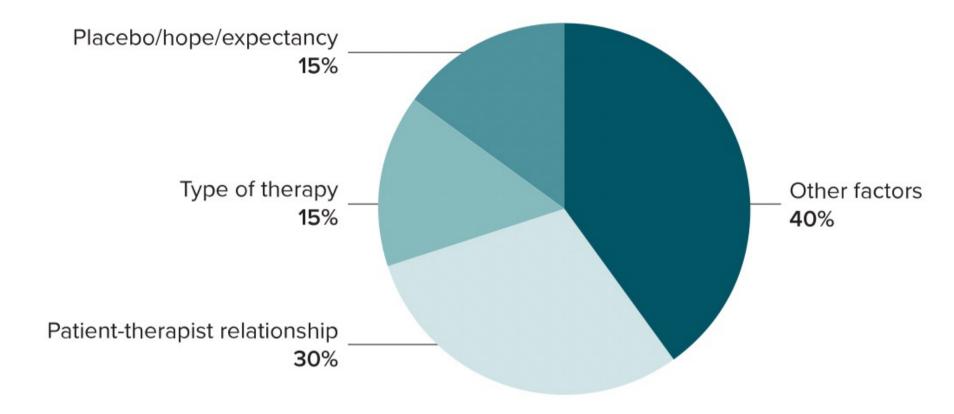
On average, therapists rated their current effectiveness around the 71st percentile. None of them rated below the 50th percentile (Walfish Et al., 2012)

Does Psychotherapy Work?

Multiple psychotherapy outcome studies show psychologically distressed people who receive therapy are better off than 80% of the distressed people who do not receive therapy (Wampold & Imel, 2015)

The effect of therapy is at least as large as the effects of psychotropic medications with fewer side effects with longer lasting results (Goldberg et al 2016).

Factors contributing to success of psychotherapy



SOURCE: M.J. LAMBERT / HANDBOOK OF PSYCHOTHERAPY INTEGRATION 1992

KNOWABLE MAGAZ

The bond between therapist and patient has a bigger impact on the success of psychotherapy than the type of therapy, studies find. "Other factors" include everything that happens outside the therapist's office, including other events in the patient's life and society as a whole.

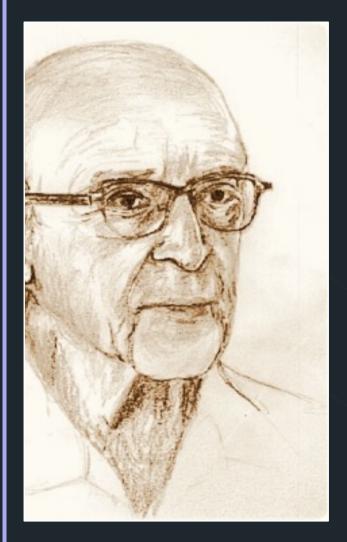
What makes up the common factors in the patient – therapist relationship?

What is it about the "magic" of psychotherapy?

Is it just human connection and reducing loneliness?

Connecting and co-creating meaning in our collaborative exploration of our client's stories and narratives.

Our mix of counselling/clinical knowledge and skills and the vital interpersonal processes that allow for the human to human connection and change

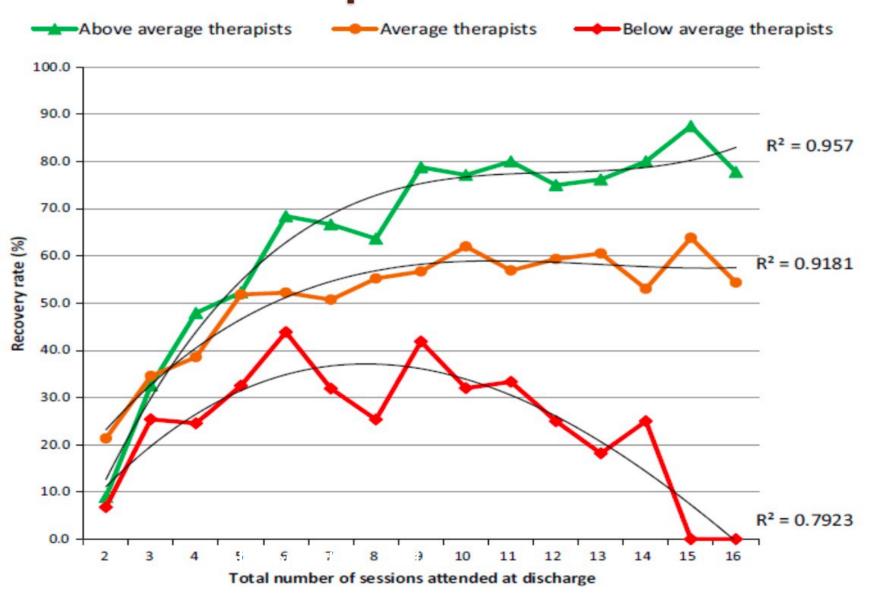


"A full knowledge of psychiatric and psychological information, with a brilliant intellect capable of applying this knowledge, is of itself no guarantee of therapeutic skill"

(Carl Rogers)

We need competence in both....therapeutic, relational, alliance and interpersonal processand the application of interventions.

Recovery Rates for Best and Worst therapists



Facilitative Interpersonal Skills (FIS)

The FIS rating scale (Anderson & Patterson, 2013) is a performance-based rating measure of eight therapist interpersonal skills using

verbal fluency

emotional expression/affective modulation

persuasiveness warmth/positive regard

Hopefulness –connection to hope and expectancy factors (+15%)

empathy

alliance bond capacity

alliance-rupture-repair responsiveness

Given the evidence -

Psychotherapy works - Yay!

Patient- therapist relationship and Facilitative Interpersonal Skills (FIS) are the best predictive factors of positive outcomes for our clients

And taking into account

The type of therapy we use accounts for only 15% of outcome; and

Self Assessment Bias is ever present

Question: What can we do to ensure the validity and effectiveness of our own practice?

Answer: Get real time feedback from our clients and track the qualitative and quantitative effectiveness of our therapy

TRACKING SESSION BY SESSION THERAPEUTIC AND TREATMENT OUTCOMES

- Allows for real time feedback of your therapy ultimately reducing deterioration and drop out rates;
- Provides accountability to funders and organisations for services rendered;
- Privileging clients to be an **active** agent of decision making in the treatment process;
- Provision for conducting ongoing practice-based
 Research

HOW DO WE DO THIS ?

QUANTITATIVE

TRACK PSYCHOMETRIC ASSESSMENTS (DASS, K10, WELL BEING MEASURES etc.)

QUALITATIVE

TRACK OUR IN SESSION THERAPY
USING CLIENT SESSION
FEEDBACK ON FIS/FIT DOMAINS

QUANTITATIVE Tracking

Novopsych.com.au (\$270/year/individual)

- * Psychometrics over 100 validated assessments
- * Assessments emailed to clients then auto scored and interpreted and graphed over time on your dashboard
- * Symptom tracking
- * Data analytics

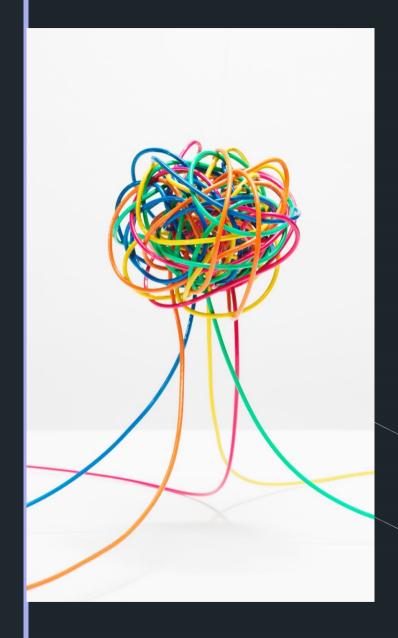
QUALITATIVE Tracking

fit-outcomes.com

Feedback Informed Treatment (\$240/year/Individual) - Likert Scale on Ipads,

Measures:
Relationship
Goals and Topics
Approach or Method
Overall Session Rating

Auto Scoring and Predictive Graphing





Real-Time Health Outcomes through AI Biometric and Psychometric Data Analysis

https://www.streampsychology.com/sensei-health

SENSEI HEALTH

QUANTITATIVE: Tracking psychological symptoms

Symptom tracking
Over 120 validated psychometric assessments
Autoscoring and interpretation
Advanced data analytics and displays
Client and Practitioner Dashboards
Integrated Homework functionality

Bespoke rule-based selection of required assessments and tracking domains

Encrypted collaborative care sharing with other health professionals which is time sensitive with required client consent

"Washing" of identifying client data for protection against cyber hacking

SENSEI HEALTH

QUALITATIVE: Tracking our Therapy

Tracking our Facilitative Interpersonal Skills (FIS) using Client —Therapist Rating (Digital Likert Scales) sent to client mobile phones after every session and tracked over time

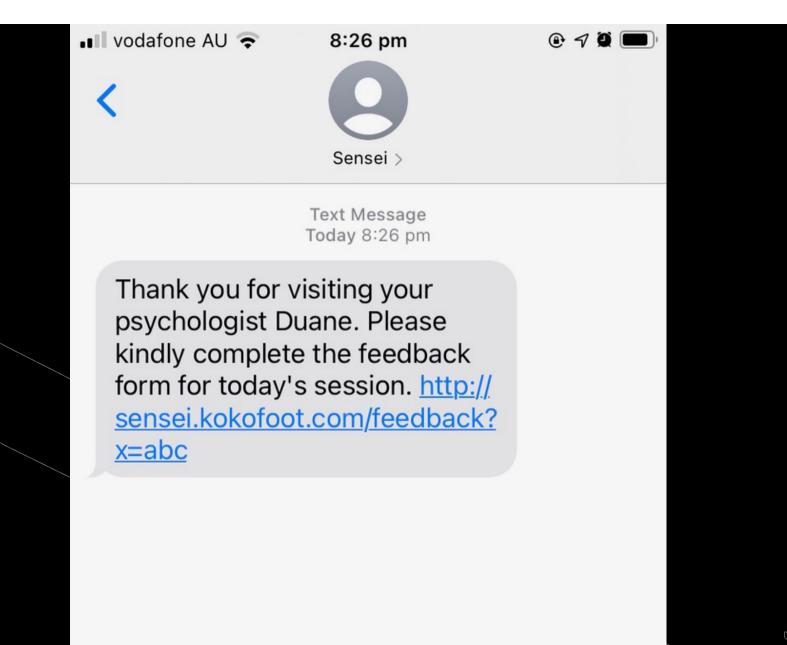
Tracking of individualized therapeutic/treatment goals/symptoms

One way client comment/communication function to boost extra session therapeutic effects

Client and Practitioner Dashboards

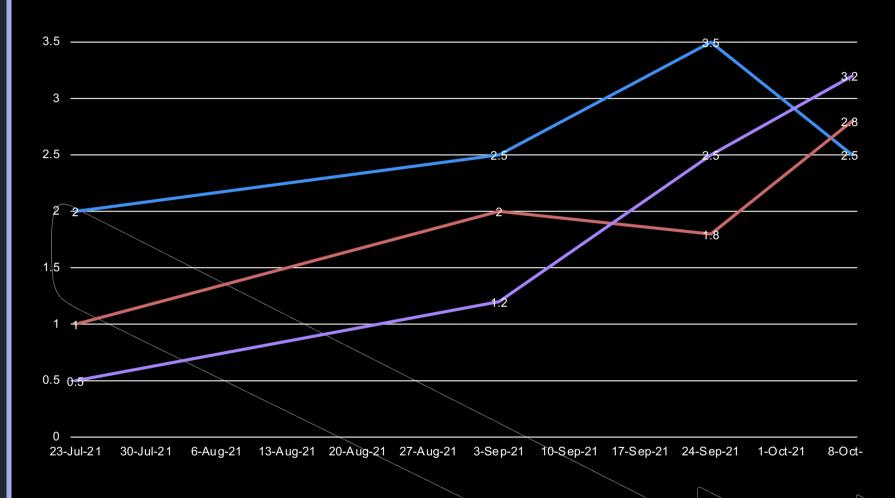
Advanced data analytics and graphical displays

Bespoke rule-based selection of required metrics to aid in deliberate practice



To assist **Duane** and our service in better meeting your therapy needs please provide feedback on your session today. This feedback is anonymous so please answer as honest as you can. Please drag slider to answer and click submit. I FOUND TODAY'S SESSION VERY HELPFUL Yes Definitely Not at all I WAS CHALLENGED IN TODAY'S SESSION IN A PRODUCTIVE WAY Yes Not at all Definitely I FEEL OPTIMISTIC THAT I WILL BE ABLE TO WORK THROUGH MY CURRENT ISSUES WITH DUANE Not at all Definitely Yes I WOULD RECOMMEND DUANE TO MY FAMILY AND FRIENDS Not at all Yes Definitely COMMENT Is there anything else you would like to tell us?

Therapeutic Relationship over Time



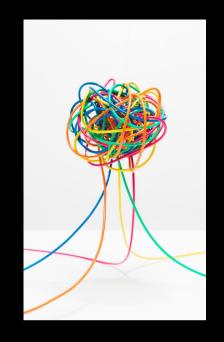
—Session Rating —Hope —Goals

Psychometric Performance



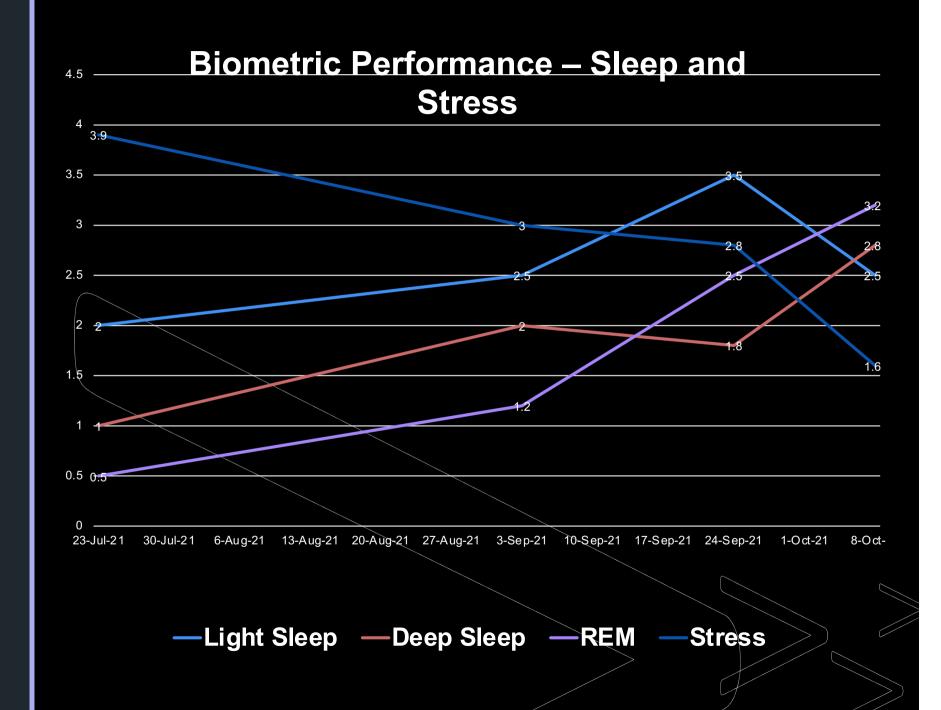
SENSEI - Biometrics

Currently Measuring and Analysing



Sleep Stress Index - Heart Rate Variability (HRV) Physical Activity (smart watches)

The impact of Somatic Therapy on Polyvagal Arousal (HRV) (Stress Response) and Sleep in Autistic Clients



Autism Mental Health: Reducing Autistic Inertia Via Somatic Practice

Collaborative research project between

SENSEI

Holly Bridges - ZEBR- Anxiety Reframe Technique (A.R.T)

Philia Labs – Biometric Smart Watches

Looked at the impact of A.R.T. Somatic Therapy on Autistic Clients' Sympathetic/Parasympathetic Arousal measuring 13 biomarkers including (Heart rate Variability (HRV-Stress Response) and Sleep.

Findings: Decreased stress response and increased better quality sleep in majority of clients (pre during post measures)

Positive qualitative subjective reporting from clients and carers on wellbeing, physical, social and communication domains.

Future Alpha Release (Jan 2025)

Integrated Practice Management System including diary, booking, medicare payment, SMS reminders, clinical templates, integrated teleheath video capabilities, session recording,

voice to clinical notes, Al

Agile and iterative development platform

Capacity to add any data source

Developing Research Platform

Integrated T-Test, ANOVA and MANOVA capabilities
PhD Anyone?

Integrated Video/Facial Recognition Options

Further Digital / Al Tools for Psychologists

Practice Management Software

(Halaxy, Clinico, Power Diary, Mastercare etc)

Voice to Text Clinical Notes

Heidi.com

CHAT GPT

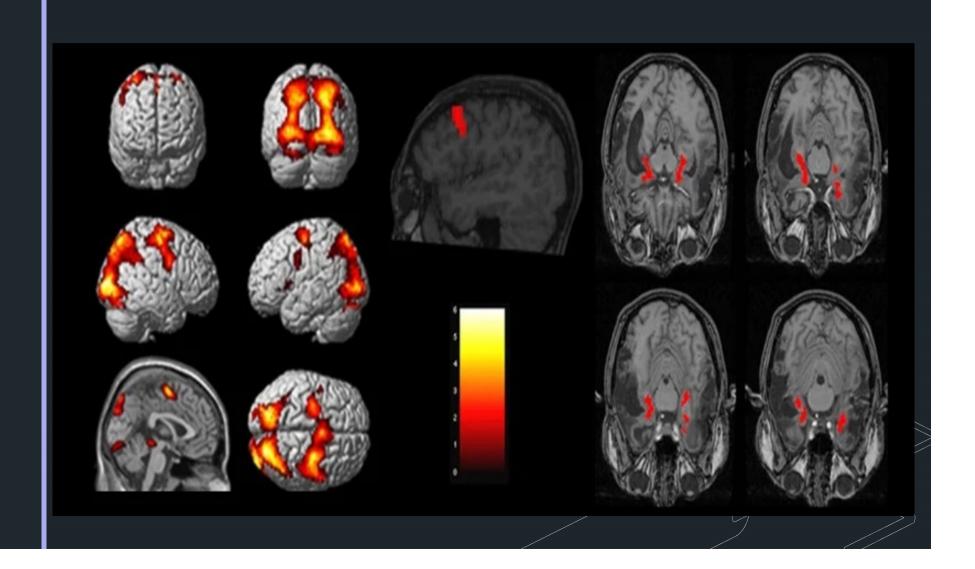
Chat GPT

https://chatgpt.com

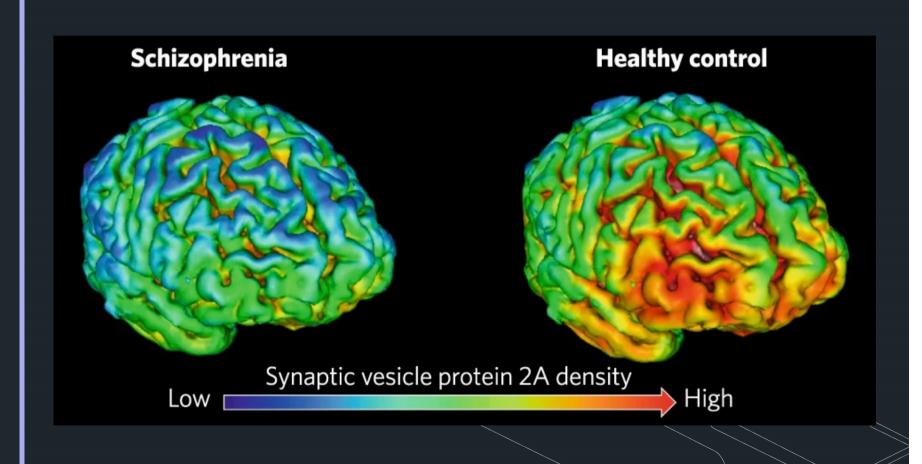
Is it just Google on Steroids
It is learning and getting better
It has a disclaimer!

Clinical / Medical
Used in Treatment Planning
Psychoeducation/Homework
Quick Look Research

Coming Soon - It is here! Functional MRI Technology Data (Kernal Flow)



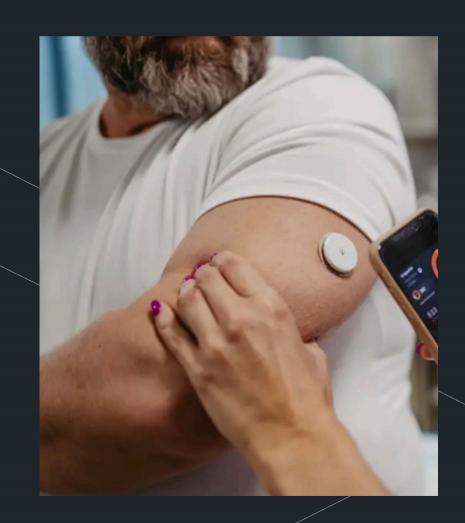
Diagnosis Implications - identifying cognitive decline Measuring Positive Treatment Responses





Pathology

Tracking Blood Work to analyse Medication Interactions in real time



Limitation and considerations in the use of Digital and Al

Meta Analysis of Effectiveness of Al and Machine Learning in Mental Health Apps

The mobile apps investigated incorporated different artificial intelligence and machine learning techniques for a variety of purposes (risk prediction, classification, and personalisation) and aimed to address a wide range of mental health needs (depression, stress, and suicide risk).

Overall, the studies demonstrated the feasibility of using artificial intelligence to support mental health apps, but highlighted the need for more research into artificial intelligence- and machine learning-enabled mental health apps and stronger evidence of their effectiveness.

(Milne-Ives, et al 2022)

Key considerations in the adoption of Artificial Intelligence in public health

Four key considerations that should shape discussions regarding the role of AI in the future of public health. These include the potential omission of vital factors due to incomplete data inputs, the challenge of balancing tradeoffs in public health decisions, managing conflicting inputs between public health objectives and community preferences, and the importance of acknowledging the values and biases embedded in AI systems, which could influence public health policy-making.

(Bavli and Galea, 2024)

Impacts on Critical Thinking – What do we lose ...each time we upgrade?

The Future

Are we going to be replaced by Robots?

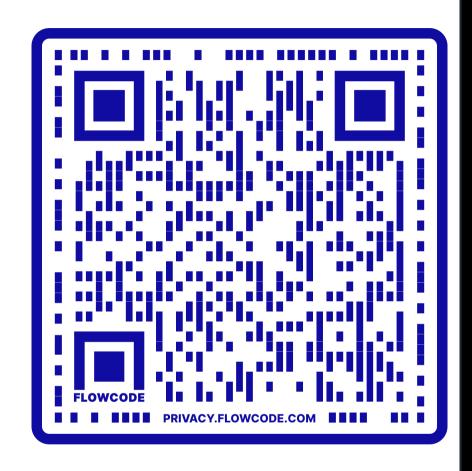
The "magic" of face to face
human to human interaction
cannot be replaced by machines... yet!

Association of Counselling Psychologists (ACP)

https://acpwa.org.au/

ACPI Association of Counselling Psychologists





Sensei Heathcare

ACP