HARNESSING AI IN SOCIAL WORK

ENHANCING RESILIENCY, CONNECTION, AND RESOURCE ALLOCATION FOR TRAUMA SURVIVORS

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INTRODUCTION

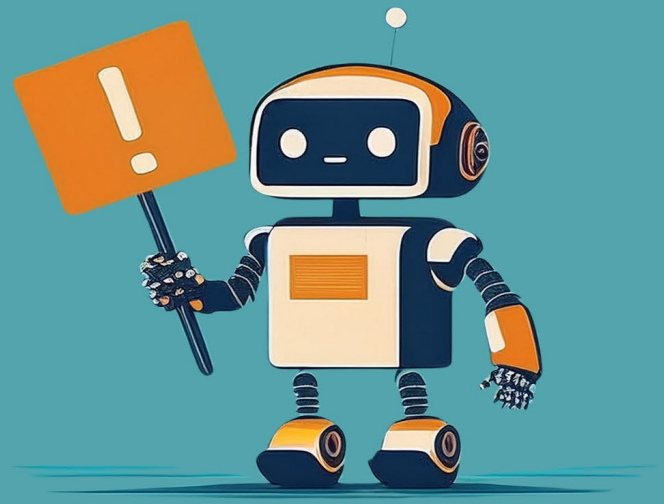
Artificial Intelligence (AI)

Presenter Education and Background

National Crime Victims Research and Treatment Center (NCVC)

Survivors of Homicide Support Group (SHSG)

DISCLAIMER!



LEARNING OBJECTIVES

1. Define AI and its role in social work practice
2. Explore AI-driven tools that enhance resiliency, connection, and resource allocation
3. Discuss ethical considerations in AI-powered social work practices
4. Provide real-world case applications
5. Gain insights into the future of AI in advancing our field of social work

WHY AI MATTERS IN SOCIAL WORK

CHALLENGES IN TRADITIONAL SOCIAL WORK:

- High case loads
- Burnout
- Resource limitations

HOW AI HELPS US NOW:

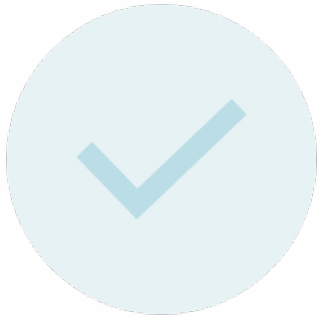
- Improves service accessibility
- Enhances risk assessment
- Enhances intervention strategies
- Reduces administrative burdens
- Allows for more direct client engagement

APPLICATIONS OF AI IN TRAUMA WORK

- Predictive Analytics
- Chatbots
- Sentiment Analysis

PREDICTIVE ANALYTICS

ANALYZES PATTERNS IN DATA



FACILITATES TAILORED EARLY INTERVENTIONS

ENHANCES DECISION-MAKING

Vali, et al., 2025

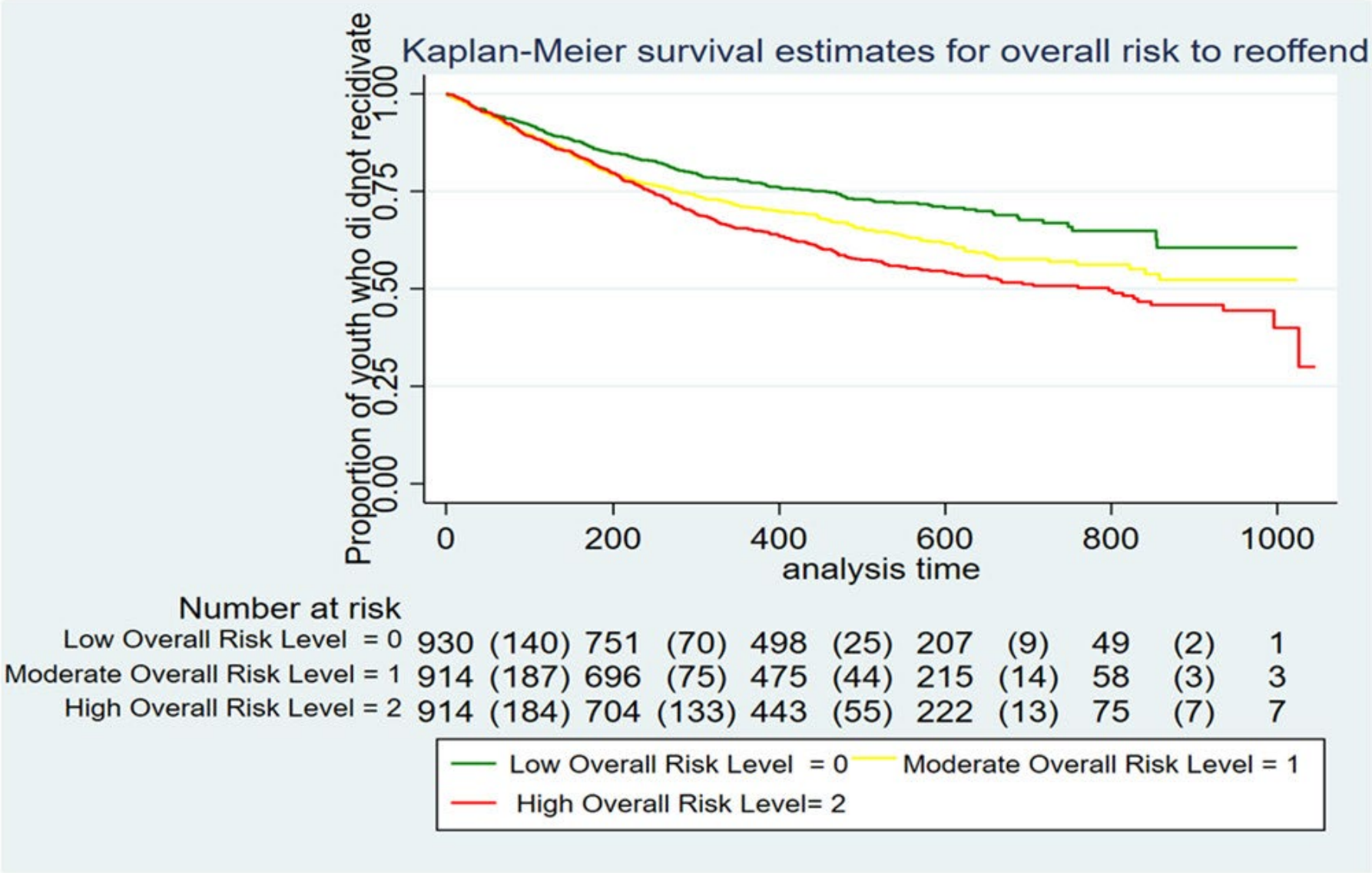
EXAMPLES

Predicting Risk & Identifying Vulnerabilities	Personalizing & Tailoring Support	Visualizing Data & Enhancing Decision-Making
• IBM Watson • Palantir • Google Cloud AI	• SAS • Apricot	• Tableau • RiskScape • Qlik Sense

Aggarwal & Madhukar, 2017; Bukowski, et al., 2020; Dixon, et al. 2024

Variable[a]	3-Week ITP (*N* = 361)		2-Week ITP[a] (*N* = 108)	
	N	%	*N*	%
Sex				
Male	230	63.71	51	47.22
Female	131	36.29	57	52.78
Ethnicity				
Latinx	70	19.39	19	17.59
Not Latinx	291	80.61	89	82.41
Race				
American Indian/Alaskan Native	5	1.39	1	0.93
Asian	5	1.39	2	1.87
Black or African American	74	20.50	29	27.10
Native Hawaiian/Pacific Islander	3	0.83	0	0.00
Other	27	7.48	8	7.48
Refusal	1	0.28	0	0.00
Unknown	1	0.28	0	0.00
White	245	67.87	67	62.62
Income category				
$0–$20 000	36	10.56	22	9.24
$20 000–$49 999	116	34.02	73	30.67
$50 000–$99 999	109	31.96	90	37.82
>$100 000	80	23.46	53	22.27
Military service branch				
Air force	21	5.82	10	9.26
Army	245	67.87	59	54.63
Coast guard	2	0.55	2	1.85
Marines	54	14.96	19	17.59
Navy	39	10.80	18	16.67
Service era				
Post 11 September 2001	331	91.61	92	85.19
Deployed				
Yes	286	79.22	77	71.30
Military sexual trauma				
Yes	154	42.66	28	25.93
	M [range]	S.D.	*M [range]*	S.D.
Age	41.46 (24–74)	9.43	42.93 (26–71)	9.27
PCL-5 Baseline[b]	55.63 (19–80)	12.33	50.72 (16–80)	15.15
PCL-5 Post-Treatment	33.79 (0–80)	19.38	34.13 (0–74)	16.35

Smith (2023)



Mueller, et al. (2022)

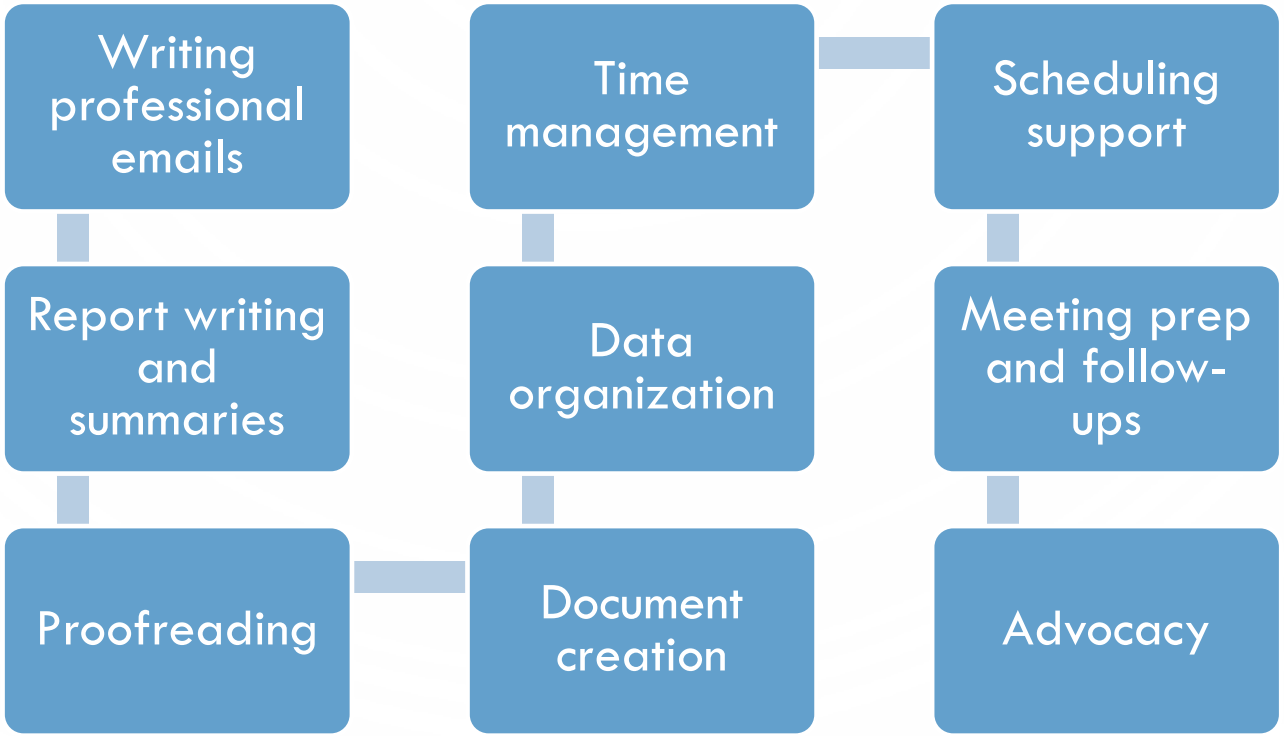
CHATBOTS

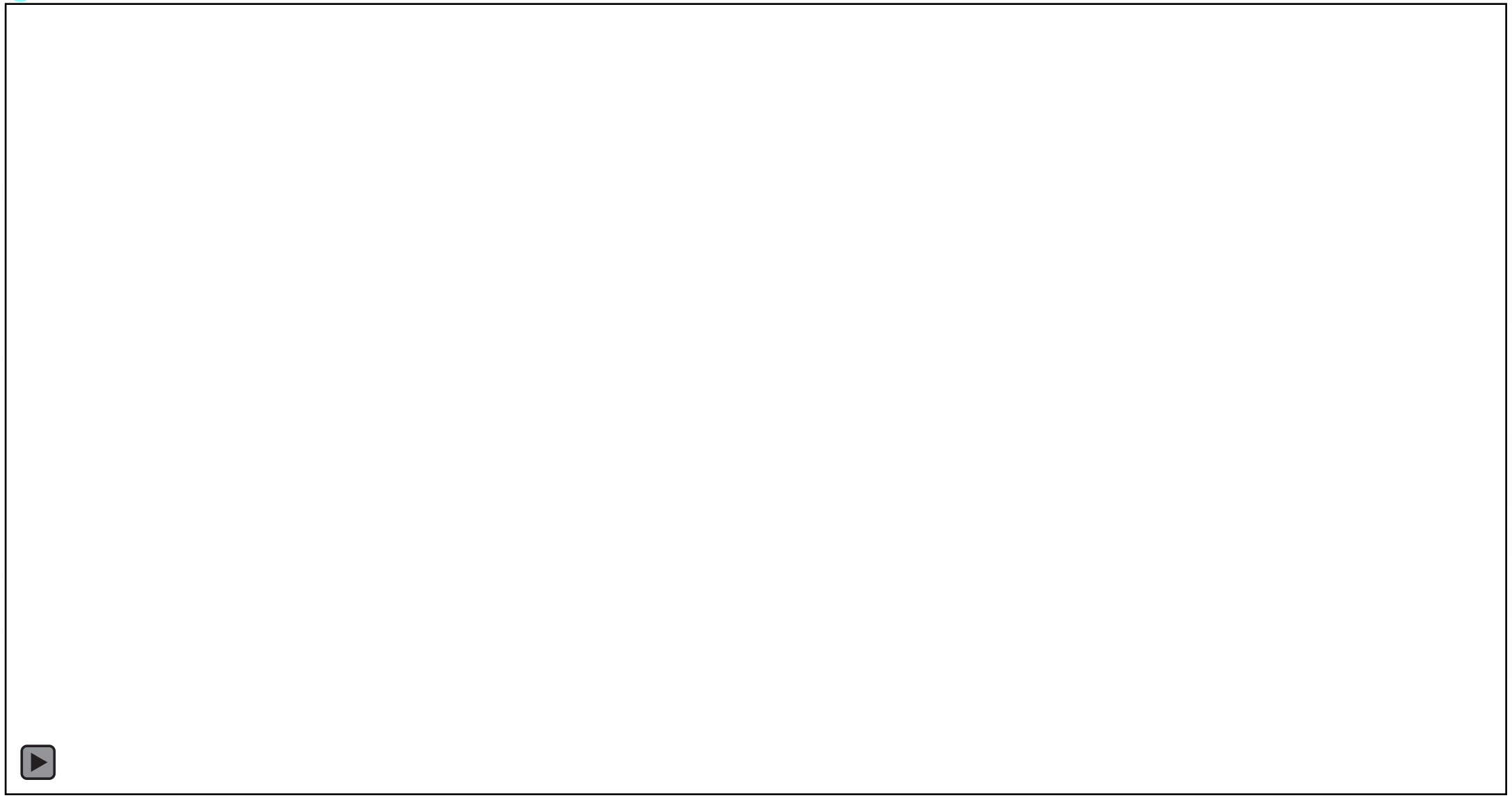
24/7/365

Non-biased

Approachable

EXAMPLE: CHATGPT





SENTIMENT ANALYSIS

Analyzes language patterns

Trajectories and trends

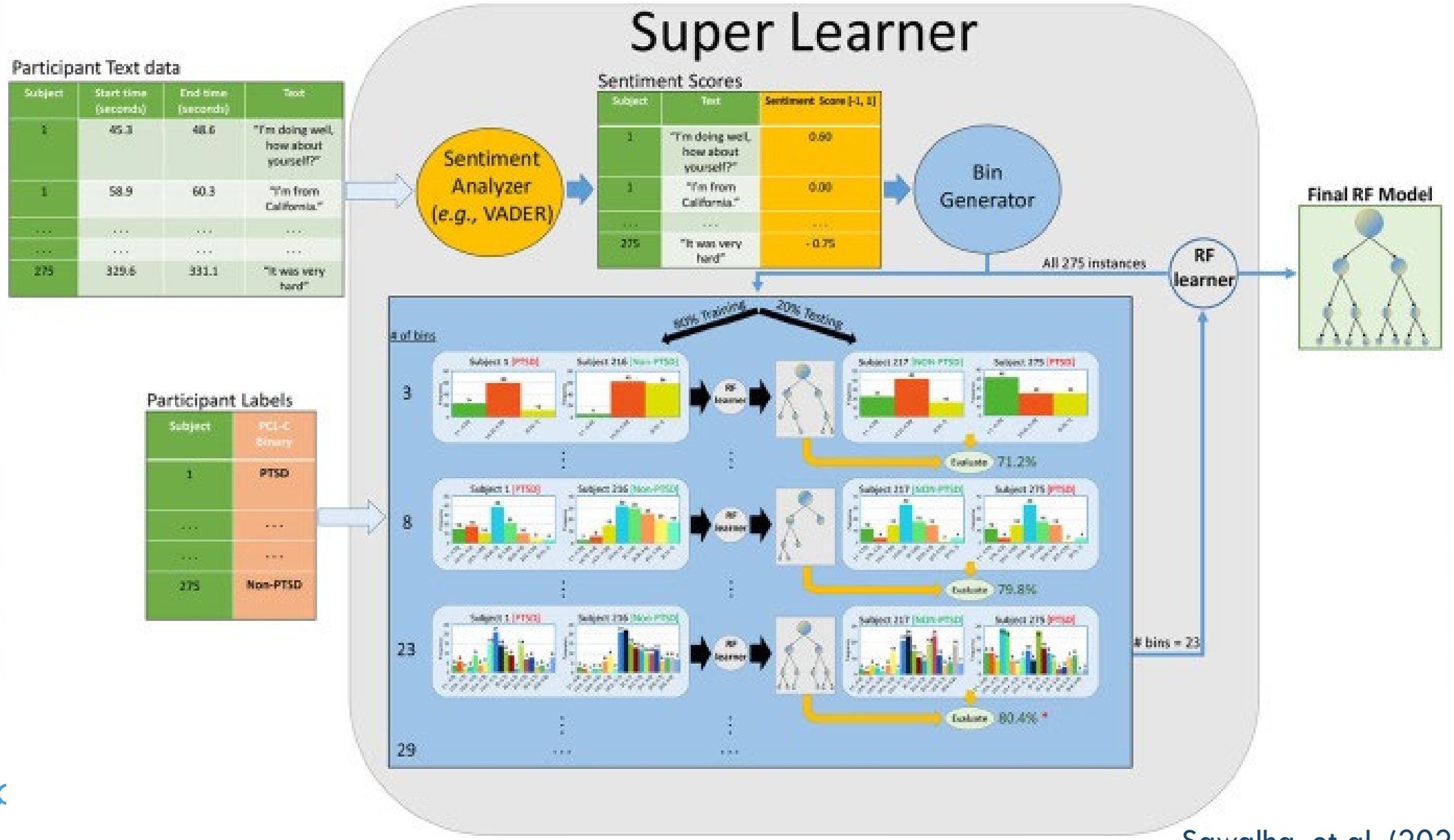
EXAMPLES

Analyzing Client Feedback

- IBM Watson
- MonkeyLearn
- Lexalytics
- Google Cloud's Natural Language API

Monitoring Social Media Sentiment

- Clarabridge
- Brandwatch
- Sentiment140
- Sprout Social
- Hootsuite Insights



Sawalha, et al. (2022)

Geifman, 2024

OPEN-LOOP AI V. CLOSED-LOOP AI

Open-Loop	Closed-Loop
Static Pre-programed No learning from data	Dynamic Adaptive Self-improving

AI IN ACTION

ENHANCING RESILIENCY

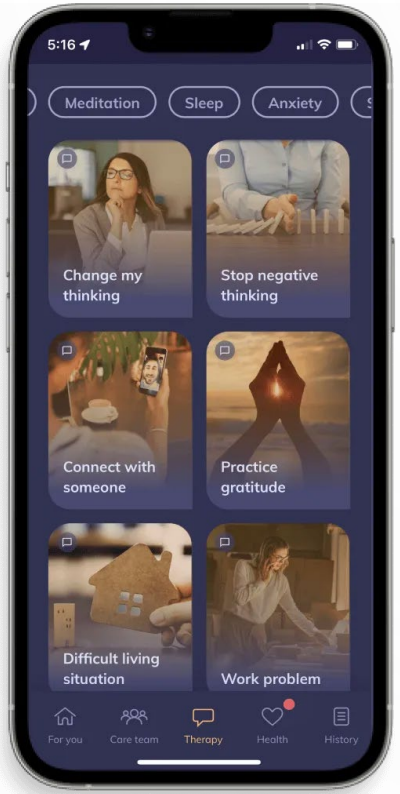
AI-POWERED MENTAL HEALTH CHATBOTS

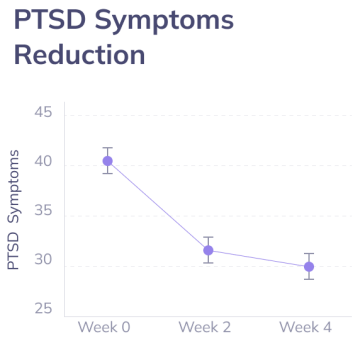
wysa

Woebot Health™

AI-DRIVEN COGNITIVE BEHAVIORAL THERAPY

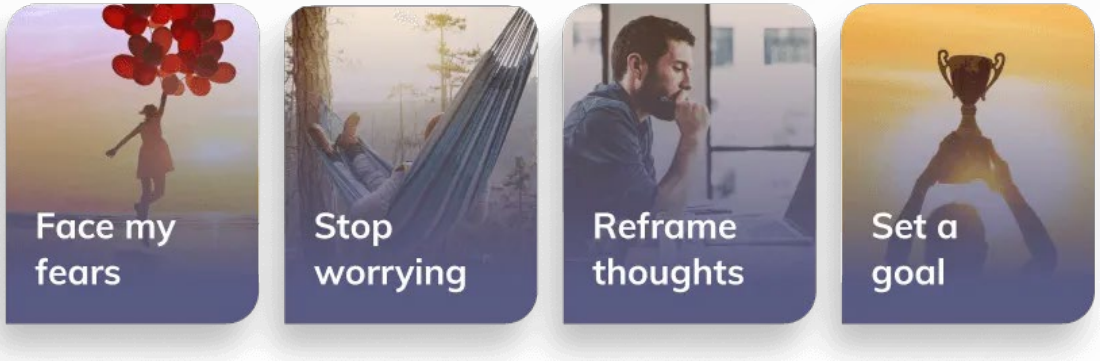
AI-BASED EMOTION RECOGNITION



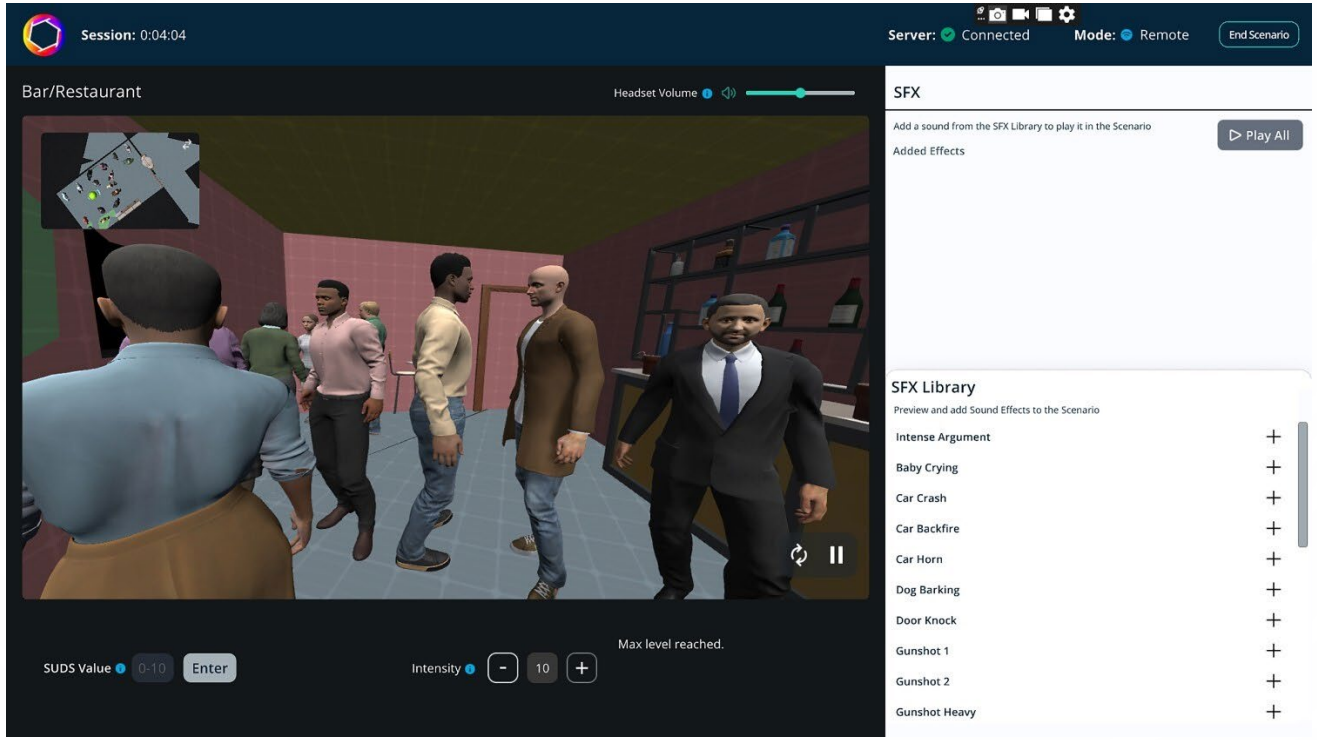


Post-Traumatic Stress Disorder symptoms measured using the a scaled adapated from the PTSD Checklist for DSM-5 (PCL-5).

youper

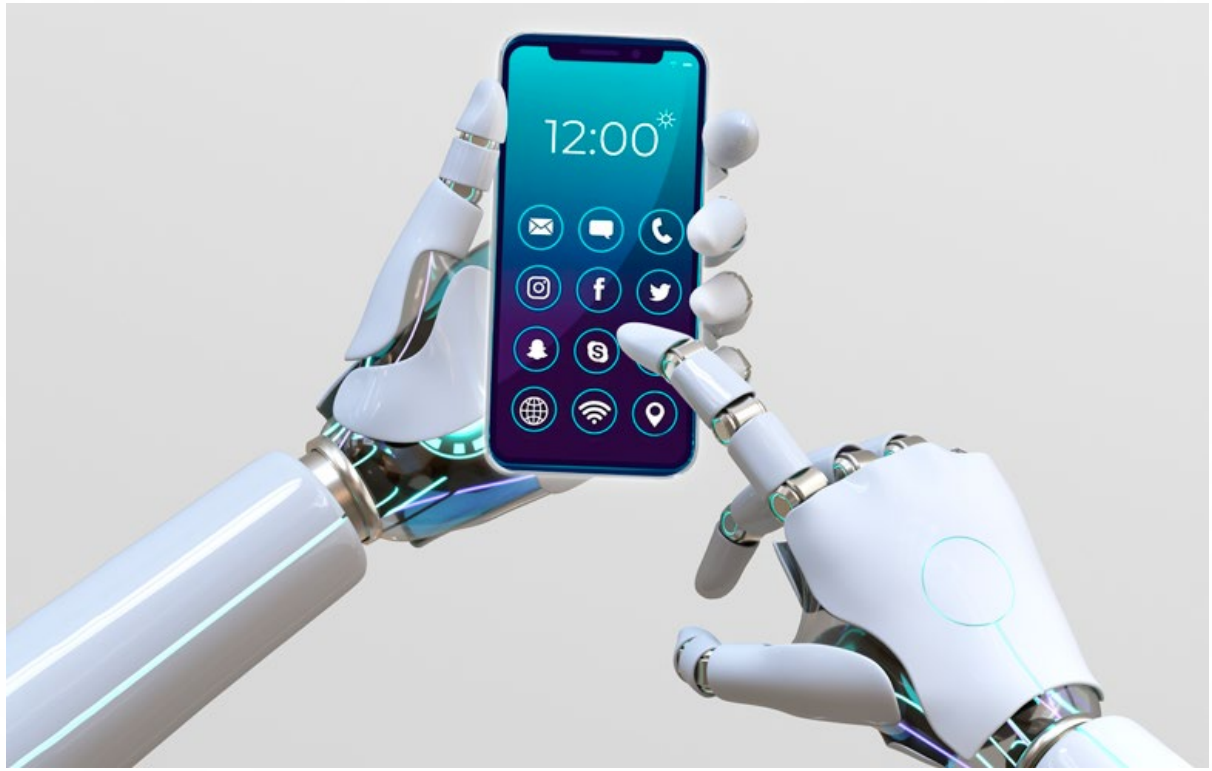


VIRTUAL REALITY EXPOSURE THERAPY (VRET)



Javanbakht, et al., 2024

AI-ENHANCED MOBILE APPLICATIONS

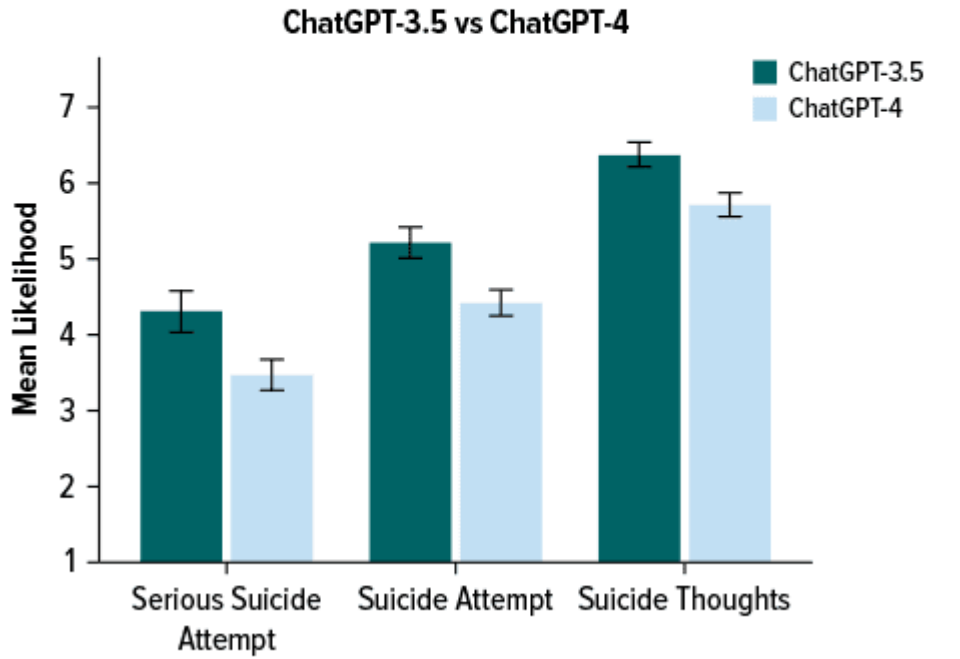


Shinan-Altman, et al., 2024

PREDICTIVE ANALYTICS FOR SUICIDE PREVENTION

Figure 4.

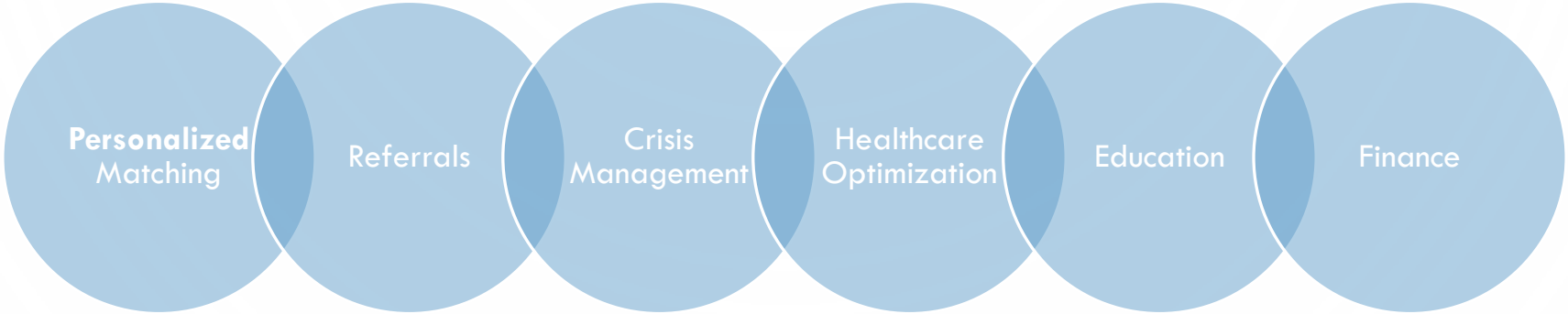
Comparison Between ChatGPT-3.5 and ChatGPT-4 on the Likelihood of Serious Suicide Attempt, Suicide Attempt, and Suicide Thoughts (Mean ± SEM)



AI IN ACTION

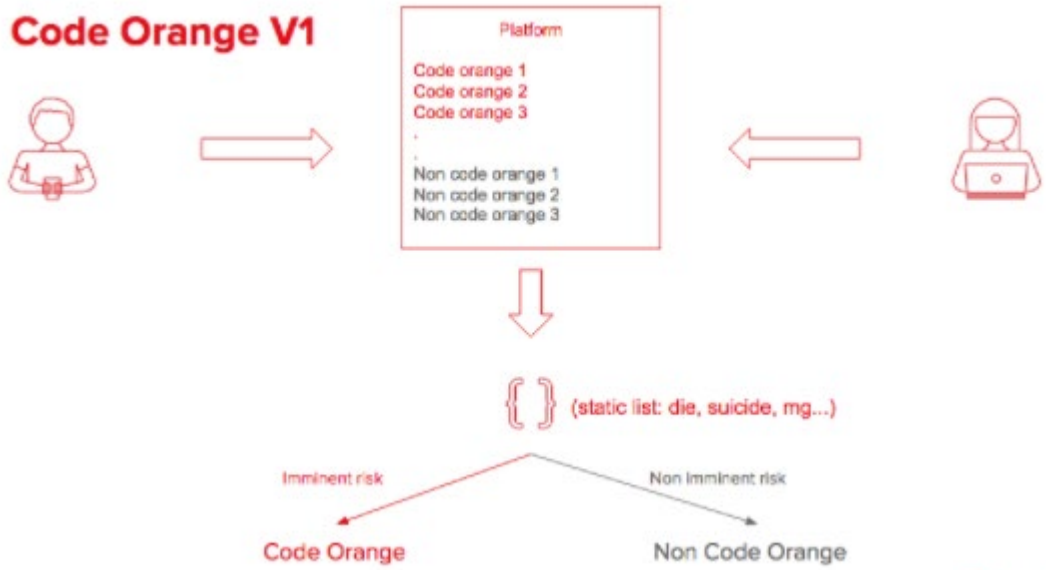
STRENGTHENING CONNECTION AND RESOURCE ALLOCATION

RESOURCE ALLOCATION

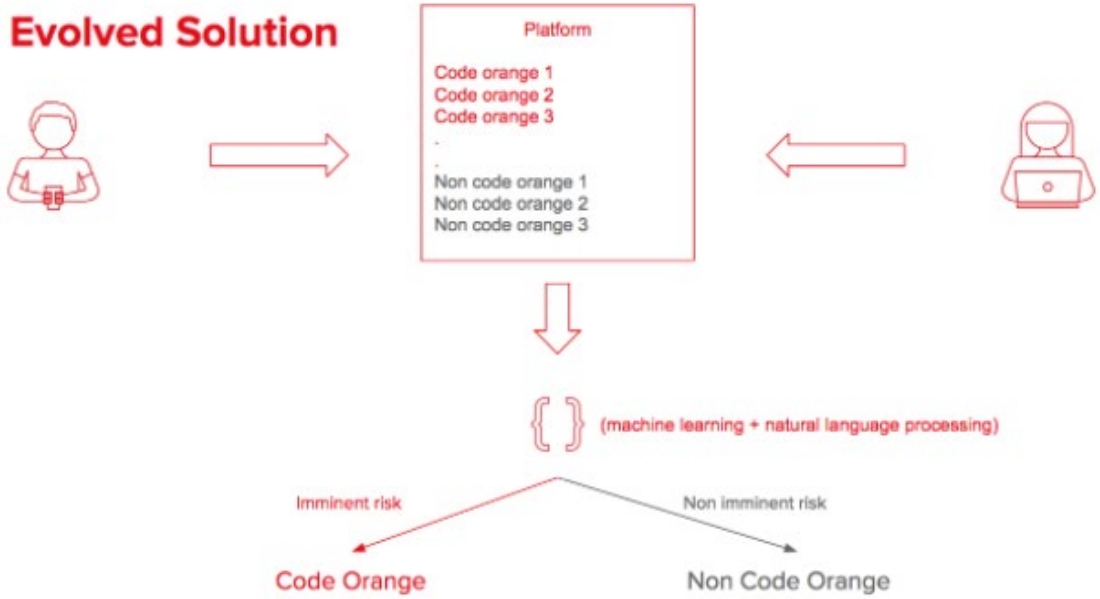


STRENGTHENING CONNECTION

Code Orange V1



Evolved Solution



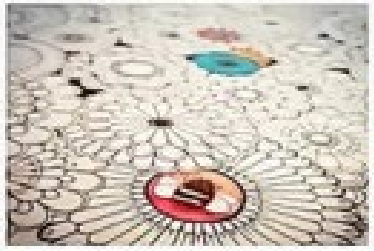
Crisis Text Line, 2020

Francois, et al., 2024

1 Prepare the colored pencils;

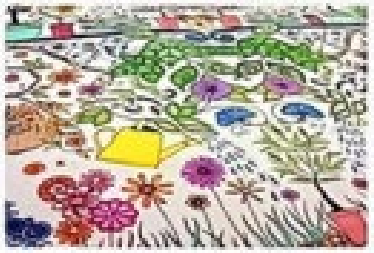
2 Relax and feel free to choose where to start coloring to fully unleash your magic;

Try different colors, all will have an artistic effect beyond your imagination.



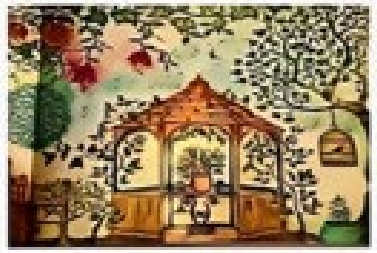
Only paint the picture partially, the effect is not the same.

The base color becomes black, which can increase the sense of mystery.



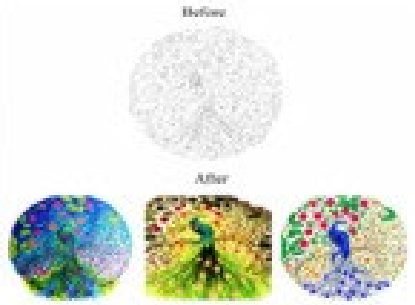
Apply every part and enjoy the whole process.

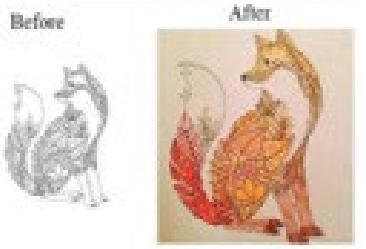
Gradient coloring to increase the sense of three-dimensional.



Coloring outside the outline to produce an oil painting effect.

3 Use each color wisely and let them release different energy;





Nair, et al., 2022; Wang, et al., 2022

PROFESSIONALLY & PERSONALLY

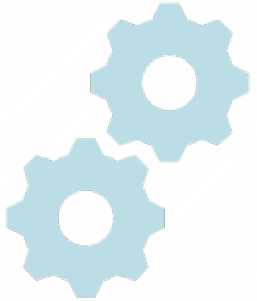
MANAGING EMOTIONAL WELLBEING

AI-POWERED MENTAL HEALTH SUPPORT

AI-POWERED JOURNALING & REFLECTION

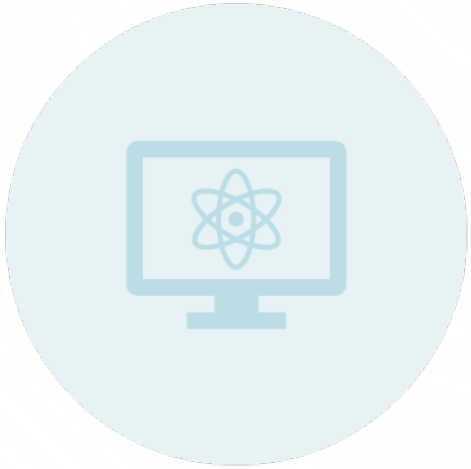
WORKLOAD & STRESS MANAGEMENT

AI-Powered Case Management & Documentation Tools



AI for Prioritizing Tasks & Reducing Overload

PROFESSIONAL DEVELOPMENT & SUPPORT



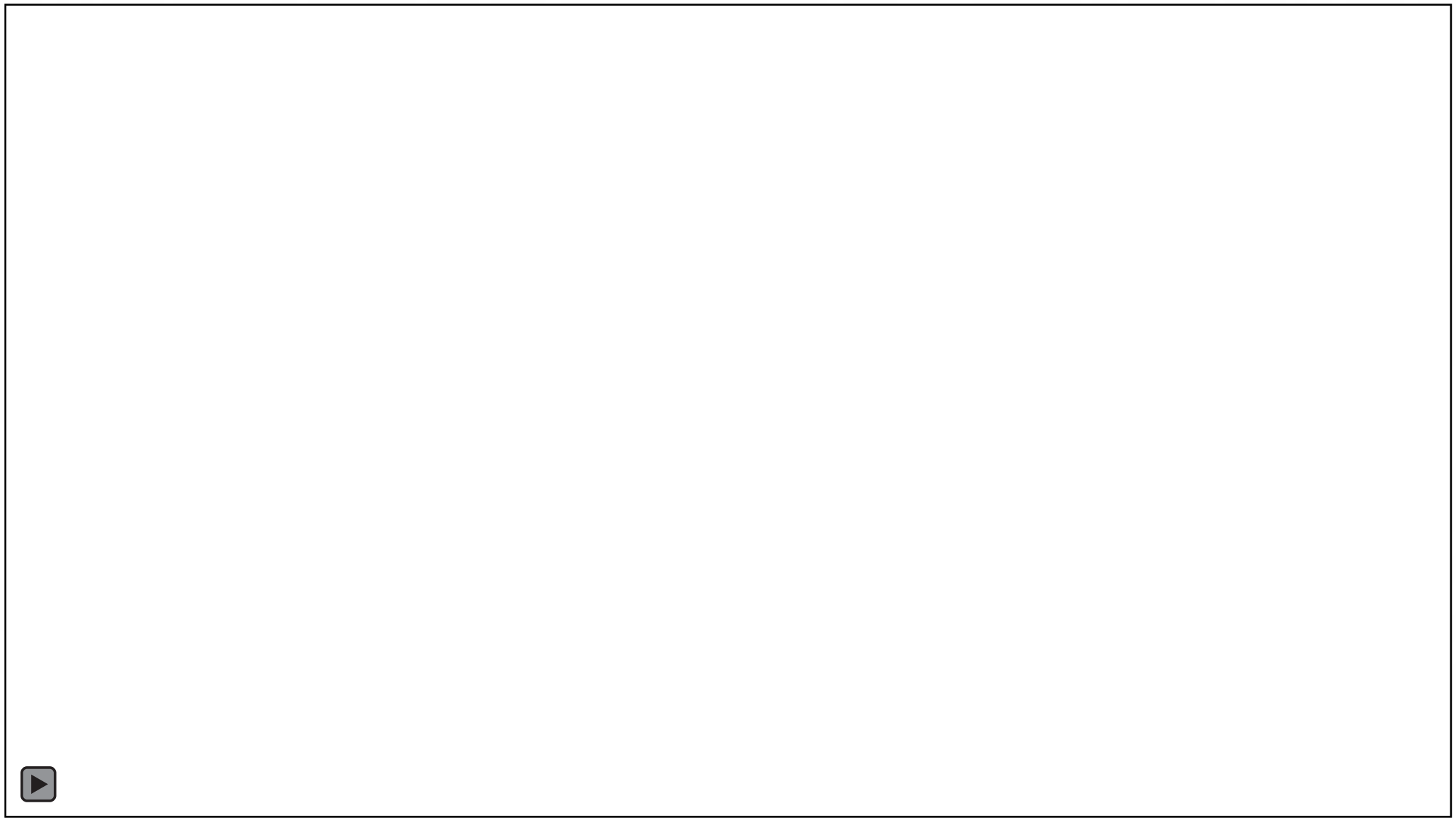
AI-DRIVEN TRAINING & SKILL DEVELOPMENT

AI FOR PEER SUPPORT & COLLABORATION

PERSONAL RESILIENCE & WORK-LIFE BALANCE

AI for Mindfulness & Meditation

AI for Physical Wellness & Sleep Optimization



ETHICAL CONSIDERATIONS

- Social Work Core Values
- Privacy & Confidentiality
- Bias
- Equity
- Human Oversight
- Accountability
- Transparency
- Informed Consent

Table 1 Sample demographics ($N=91$)

	Young adults ($N=32$)	Parents ($N=25$)	Providers ($N=33$)
Age range (mean)	18–25 (21.5)	27–78 (46.5)	23–72 (48.9)
Sex, *N* (%)			
Male	10 (31%)	4 (16%)	7 (21%)
Female	22 (69%)	21 (84%)	26 (79%)
Race, *N* (%)			
American Indian/Alaska Native	22 (69%)	19 (76%)	19 (58%)
Mixed Heritage (AI/AN plus other)	10 (31%)	4 (16%)	6 (18%)
Other (White, Hispanic, Black)	0 (0%)	2 (8%)	7 (21%)

Table 2 Themes and subthemes by number of focus groups (FGs) and type of participants

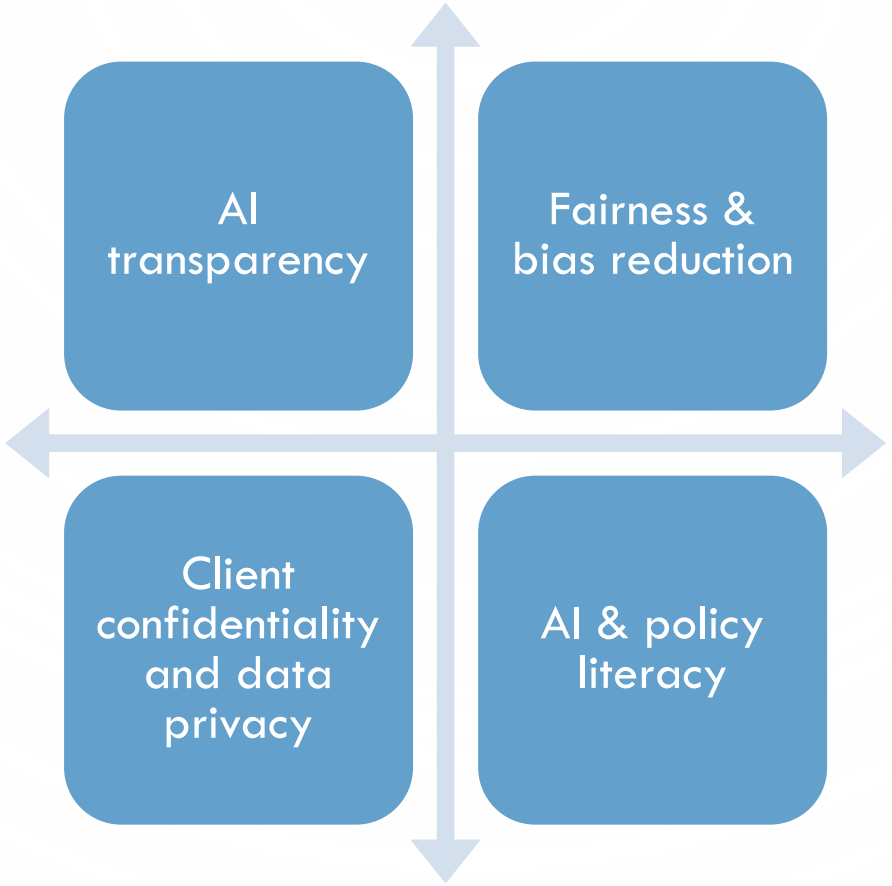
Theme *Subtheme*	Total ($n=13$ FGs)	Young adults ($n=6$ FGs)	Parents ($n=4$ FGs)	Providers ($n=3$ FGs)
Risk factors				
AOD use	13	6	4	3
Community AOD use	12	5	4	3
Witnessed AOD use	11	4	4	3
Personal AOD use	5	1	2	2
Trauma	12	5	4	3
Historical and intergenerational	12	5	4	3
Other trauma	3	2	0	1
Urban challenges and opportunities	12	5	4	3
Poverty of opportunity	11	5	3	3
Economic hardship	9	3	3	3
Resilience factors				
Immediate family support	7	2	3	2
Extended and community support	12	5	4	3
Adaptation to risky AOD settings	8	4	2	2
Family distancing	7	4	1	2
Intentional sobriety	3	2	1	0
Positive change	5	3	1	1
Family communication	8	2	4	2
Family storytelling	7	2	3	2
Family engagement in traditional practices	7	2	4	1

CASE STUDY: AI IN TRAUMA RECOVERY

A client has recently lost their son to homicide and is experiencing significant distress. They are on a waitlist for specialized trauma therapy but need immediate support. Ai-assisted interventions, including skills for psychological recovery (SPR), provide real-time coping tools during this critical waiting period.

THE FUTURE OF AI IN SOCIAL WORK

KEY ADVOCACY AREAS



Q&A