

USC Judith D. Tamkin Symposium on Elder Abuse
Closing the Research Gaps – Moving the Field Forward

Innovative Research Approaches

Goal Attainment Scaling

Collaboration

David Burnes, PhD

Assistant Professor

University of Toronto, Factor-Inwentash Faculty of Social Work

david.burnes@utoronto.ca

Website: <http://socialwork.utoronto.ca/profiles/david-burnes>

Mark Lachs, MD, MPH

Psaty Distinguished Professor of Medicine

Co-Chief of Geriatrics

The Weill Medical College of Cornell University

Director of Geriatrics, New York Presbyterian Health System

Measurement Challenges in the Context of Community-Based Elder Mistreatment Response Programs

*How do we measure the effectiveness of elder
abuse interventions when the nature of the
problem and the definition of success is different
across cases?*

Knowledge Gap



Effective Elder Abuse Interventions

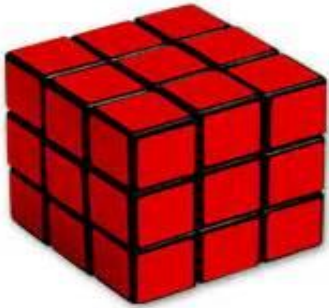
Secondary Prevention

Central Outcome Indicator of Intervention Program Success

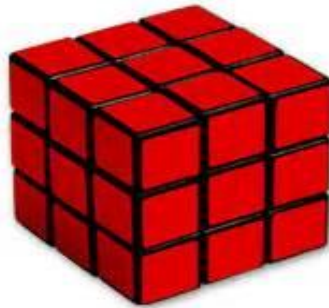
*Extent to which a program can alleviate
mistreatment re-victimization risk in accordance
with an older adult client's self-determined
notion of problem resolution*

Central Intervention Outcome

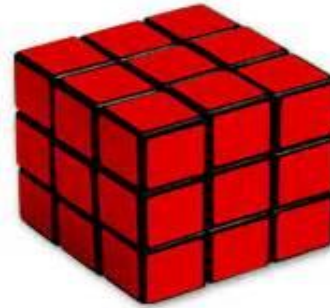
Case 1



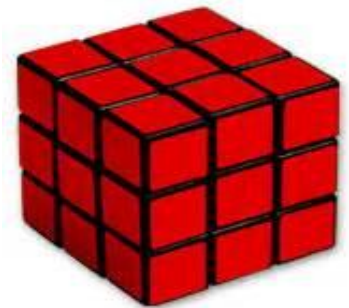
Case 2



Case 3



Case 4



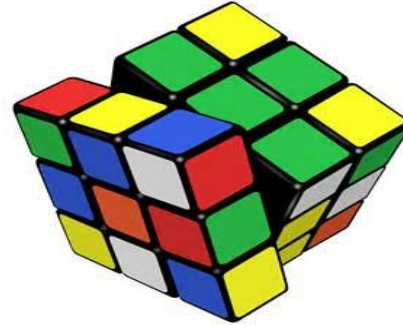
Case 1



Case 2

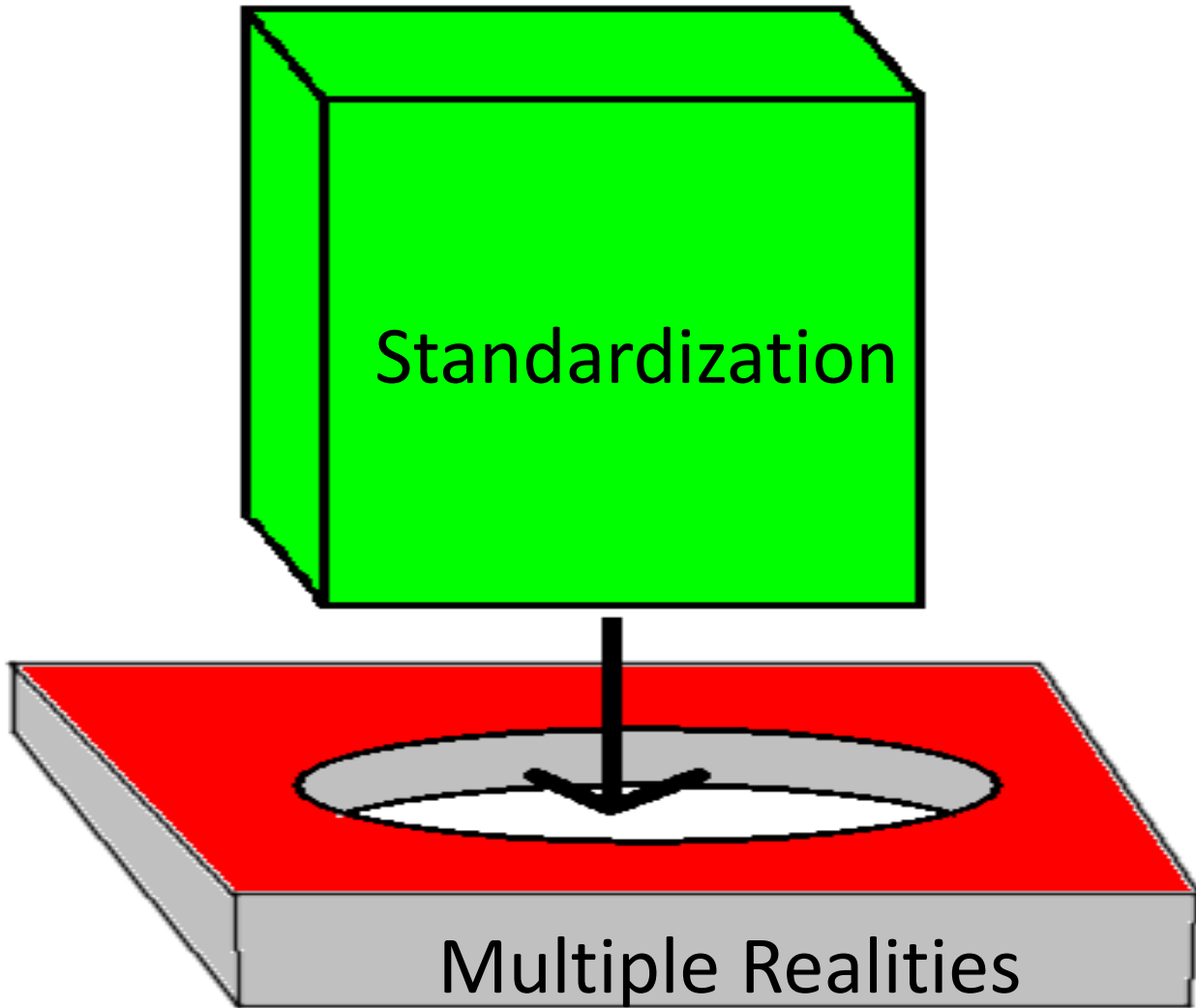


Case 3



Case 4





Goal Attainment Scaling

What is Goal Attainment Scaling (GAS)?

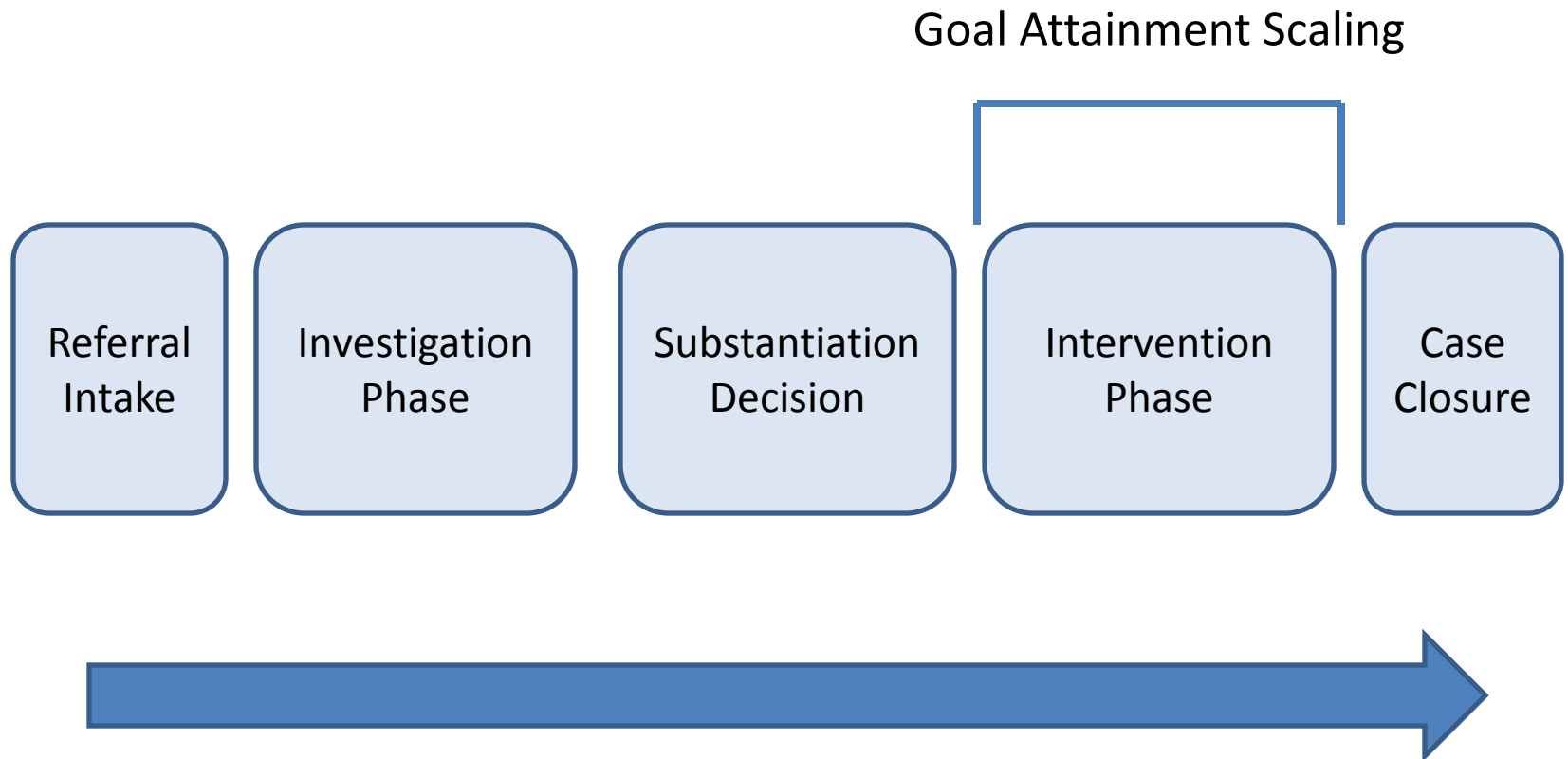
- A client-centered or “clinometric” measure of client change (or change in case status) over the course of intervention
- Each case is assessed on a different, individualized set of goal items
- Goals are established that reflect the client’s objectives and construction of success.
- Summary score is transformed into a standardized t-score for comparison across cases

GAS Used Extensively

GAS has demonstrated feasibility, reliability, validity, and/or responsiveness in several fields:

- Physical rehabilitation (paediatric, adult, geriatric)
- Brain injury rehabilitation
- Spasticity
- Pain management
- Geriatric care
- Occupational therapy
- Autism
- Cerebral palsy
- Multiple sclerosis
- Intellectual disabilities
- Vocational rehabilitation
- Etc.

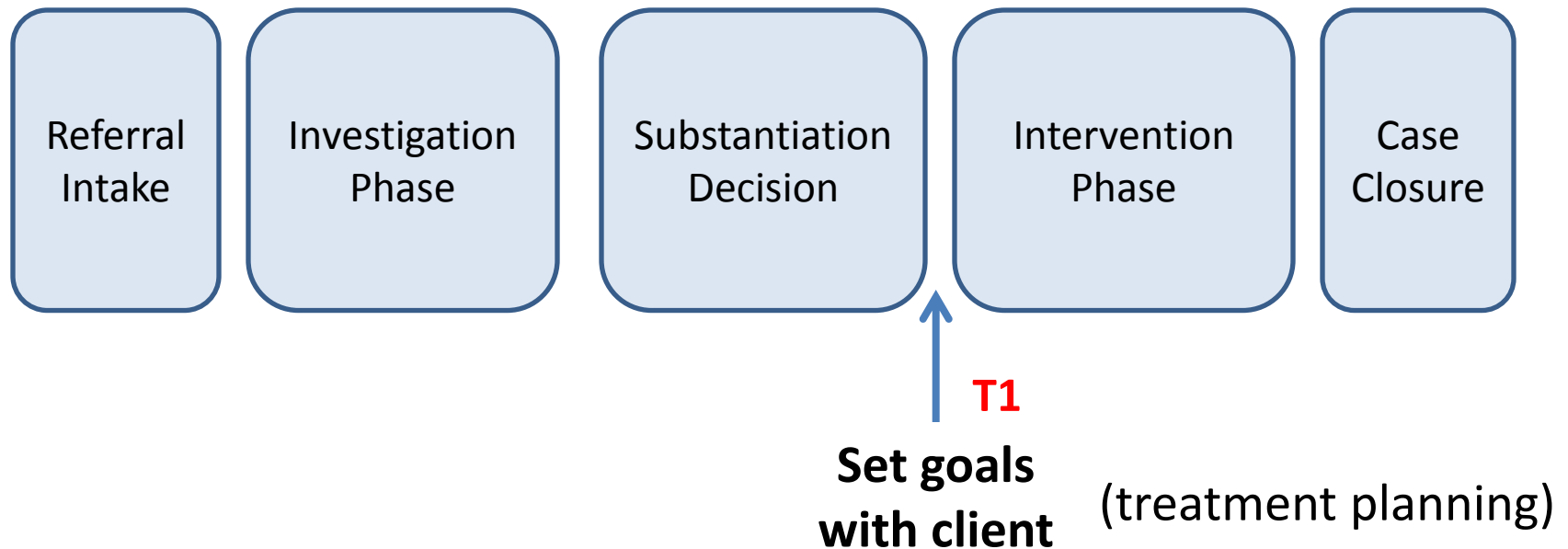
Where Does GAS Fit in APS Practice?



How Does GAS Work?

Post-Substantiation/Pre-Intervention

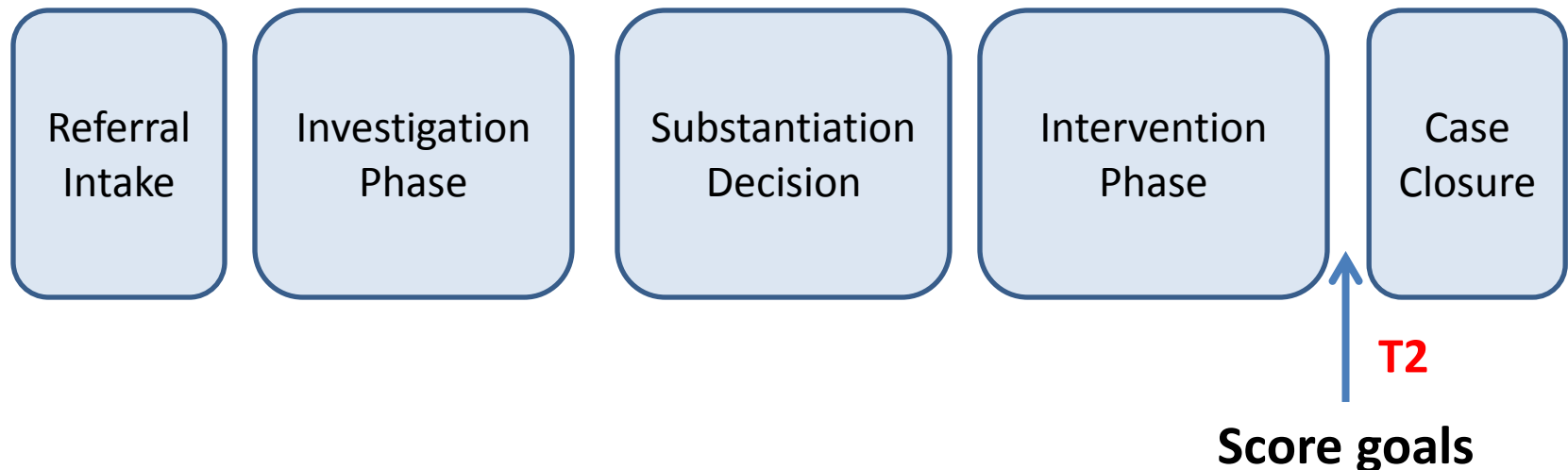
- Collaborative client-practitioner process to identify mutually understood goals, tasks, and expectations
- Each goal is defined and measured on a five-point scale from -2 to +2



How Does GAS Work?

Case Closure

- Client status is assessed against each five-point scale
- Each goal score is entered into a GAS formula that generates a standardized score



Five-Point Goal Scale

Each goal that is set with client has the same 5-point ordinal scale structure

Much
less than
expected

-2

Somewhat
less than
expected

-1

Expected
client
outcome

0

Somewhat
better than
expected

+1

Much
better than
expected

+2

GAS Formula

$$GAS\ Score = 50 + \frac{10 \sum(W_i X_i)}{\sqrt{((1 - \rho) \sum W_i^2 + \rho (\sum W_i)^2)}}$$

W_i is the weight assigned to the i -th goal; X_i is the numerical score achieved for the i -th goal; and ρ is the expected correlation of the goal scores

Goal Attainment Scaling

- Represents a promising alternative to use on its own or alongside standard scales
- Measure change on an individualized set of goal items that collectively seek to reduce the broader construct of re-victimization risk
- Goals are also selected and defined in a manner that is congruent with a client's notion of success

Current Study

Setting: State of Maine APS

Objective: Adapt GAS into the APS context to measure change in client re-victimization risk status over the course of intervention towards individually constructed outcomes of problem resolution

- 1) Pilot feasibility of GAS in the APS context using application (app) software technology
- 2) Examine GAS psychometric properties of reliability, validity, and responsiveness

GAS Application - Original

- 1) Client and practitioner collaborate and achieve mutual understanding about the domains of risk contributing to the potential for re-victimization
- 2) Client and practitioner collaborate to develop plan of action (or treatment plan) with individualized set of goals that address each risk domain – includes mutual understanding about goal outcome expectations and perceptions of success
- 3) Client/practitioner or practitioner alone develops five-point scales for each goal from scratch
- 4) Client/practitioner or practitioner alone scores each goal scale

Overly time-consuming and arduous in busy clinical settings

Adapted GAS Application: Pre-Worded Goal Menu

- Involves client and practitioner selecting pre-worded goal scales from a menu of goals routinely encountered with the specific client population
- Only select pre-populated goals that are relevant to a given client's situation
- Flexibility to apply goal scales in the template pre-populated form or edit them to more closely align with a client's unique circumstances and perceptions
- In some cases, practitioner may need to develop a goal scale from scratch if the goal is not represented on the menu

GAS Study – APS

Phase 1

Construct Pre-Worded Menu of GAS Goals/Scales

- Iterative group process with practitioners and managers
 - 19 goals/scales to date
- In-vivo application with clients to add goals/scales
- Menu will expand over time towards exhaustiveness

Phase 2

Prospective study to pilot the feasibility and validity/reliability/responsiveness of GAS in APS context

Goal Scale Examples

Living Arrangement Separation – Evict Perpetrator

+2	Perpetrator is evicted with final order of protection and does not attempt to access house
+1	Perpetrator is evicted with a temporary order of protection that the client chooses to enforce
0	Perpetrator is evicted with a temporary order of protection that the client chooses not to enforce
-1	Perpetrator is removed from the home without a Court Order but then continues accessing the home
-2	No order of protection sought, perpetrator is living in home

Goal Scale Examples

Social Engagement – Community Integration (Participation in Adult Day Care Centre, Senior Centre or Day Programs)

+2	Attend adult day center more than once per week regularly for multiple activities/hours
+1	Attend adult day center once per week regularly for multiple activities/hours
0	Attend adult day center once per week regularly for one activity/hour
-1	Attend adult day center once and not return
-2	Does not attend adult day center at all

GAS Study APS Application

Web-Based App Demo

Possible Next Steps

Item Banking

- Develop one or more unidimensional banks of goal scales that have been calibrated into linear terms
- Allows us to perform summation of individual goal scores and multiplication functions in the GAS formula with a higher level of validity
- Provides an even more standardized way of using GAS to ensure inter-rater reliability

Acknowledgements

Funding

Elder Justice Foundation

- David Zimmerman
- Kathryn Hester

Social Sciences and Humanities Research Council (SSHRC) of Canada

Acknowledgements

Maine Department of Health and Human Services, Adult Protective Services

- Ricker Hamilton, Deputy Commissioner of Programs
- Sheri Clark Nadell, Associate Director, Adult Protective Services
- Brian McKnight, Program Administrator, Adult Protective Services
- Michael Parks, Associate Director, Office of Substance Abuse and Mental Health Services
- Practitioners: Joan Strandbygaard, Richard P. Keegan, Shannon Smith, Elizabeth Crossman, Dena M. Kenney, Joanne Cookson, Sherri Wakeling

Marie-Therese Connolly, JD

Woodrow Wilson International Center for Scholar

Karl Pillemer, PhD

Cornell University , Department of Human Development

Denise Burnette

Virginia Commonwealth University, School of Social Work