

INTRODUCTION TO DYNAMIC ASSESSMENT

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Dynamic Assessment is

- ▣ An interactive approach
- ▣ To psychoeducational assessment
- ▣ Of learning potential
- ▣ That involves
 - Teaching within the test
 - Pre-post assessment
 - Mediational teaching
 - Intraindividual comparisons
 - Estimation of effective teaching/learning strategies
 - Identification of obstacles to effective learning

Some Definitions

- ▣ Assessment vs measurement
- ▣ Dynamic vs static
- ▣ Intelligence, IQ, latent and manifest variables
- ▣ Learning potential, performance
- ▣ Intelligence and cognitive processes:
Distinction
- ▣ Mediation

Critical Dimensions of Psychoeducational Assessment

- ▣ What does one wish to assess?
- ▣ Essential comparisons
 - Subject with norms
 - Subject with self
 - ▣ Over time
 - ▣ Same time, different abilities or performances

Why do we need a different form of assessment?

- ▣ Psychologists frequently argue that IQ does not reflect intelligence or learning potential accurately. Error always unidirectional.
- ▣ Persistent claims of gender, racial, ethnic, and disability biases (evidence weak)
- ▣ Failure of intelligence-based views of the nature of ability
- ▣ Poor prediction of school achievement; differential predictive value
- ▣ Classification is an inadequate objective. How to defeat negative predictions?
- ▣ As a research tool, they are inadequate to reach much elusive information

Estimation of Learning Potential

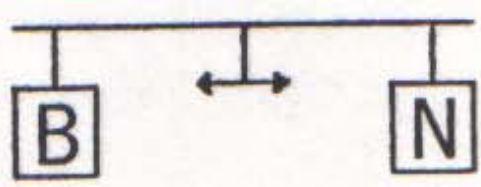
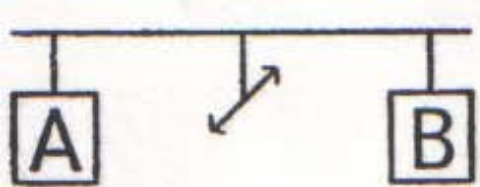
- ▣ Vygotsky's observations, children from "the republics"
- ▣ *How one learns* must affect effectiveness and efficiency of learning
- ▣ Search for
 - ..what could happen, given X treatment, rather than
 - ..what *will* happen, given no special treatment

Assumptions of DA

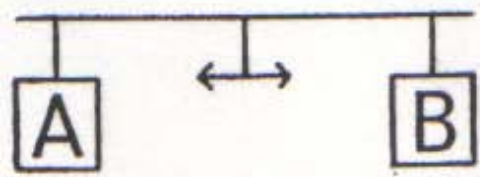
- ▣ Potential is always better than performance
- ▣ There are treatable obstacles to learning and performance
- ▣ Potential can be revealed if obstacles are removed or minimized
- ▣ Identifying and minimizing obstacles often requires giving help
 - Reducing cognitive developmental barriers
 - Reducing “artificial” barriers, e.g., ignorance, language, inexperience, resistance

Comparison of Dynamic and Static/Normative Assessment

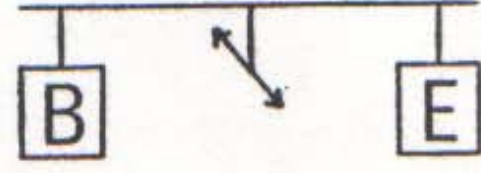
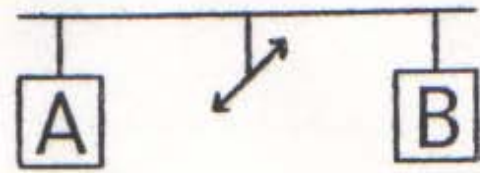
- ▣ *What is compared*
 - Self with norms vs self with self
- ▣ *Major questions*
 - What is known or not known vs what can be learned
- ▣ *Examining process*
 - Objective vs interactive
- ▣ *Interpretation of results*
 - ID of limits on performance vs ID of obstacles and ways to overcome them (learning potential)
- ▣ *Role of examiner*
 - Poses problems, records, affectively neutral vs teaches, promotes change, affectively involved



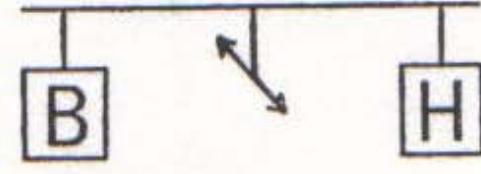
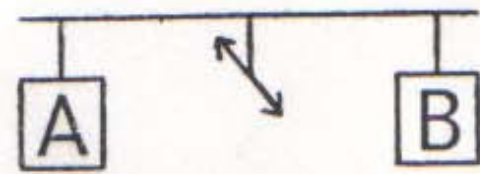
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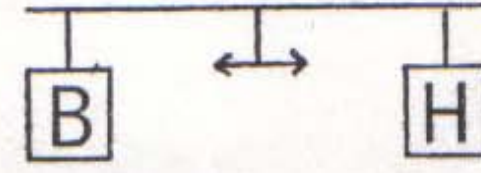
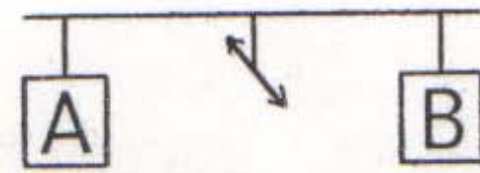
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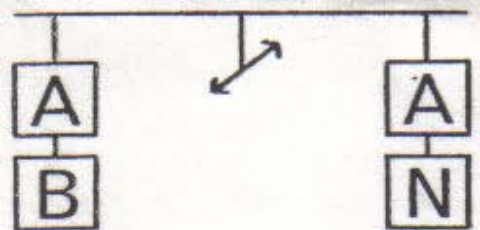
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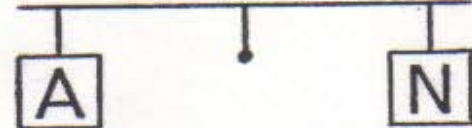
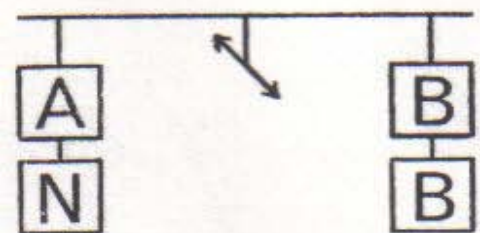
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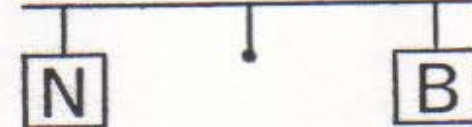
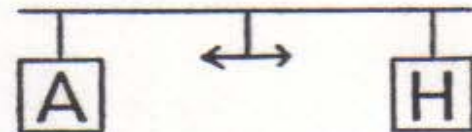
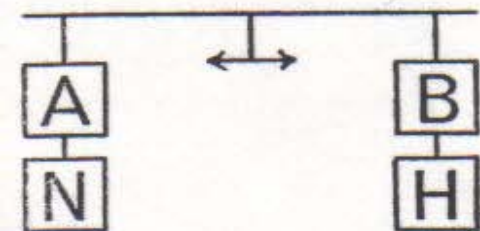
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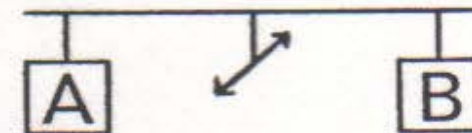
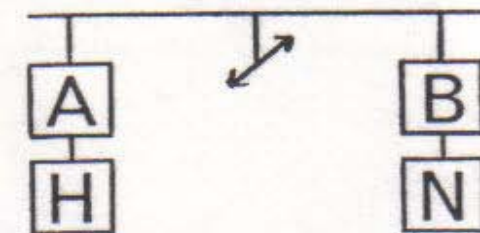
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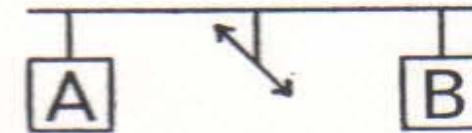
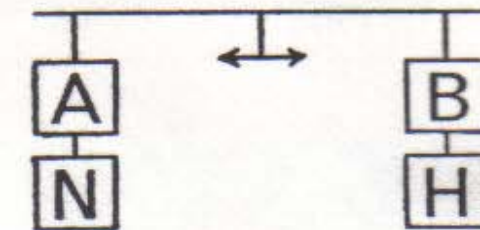
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Analytic Questions

- ▣ What *knowledge* do you need to have in order to be good at solving these problems?
- ▣ What *cognitive and metacognitive* abilities and/or habits seem to be called upon in these problems?
- ▣ What *non-cognitive* (emotional, motivational, attitudinal, dispositional) characteristics could affect performance on these problems?

Procedural Questions

- ▣ What apparent obstacles are interfering with performance?
- ▣ How can I overcome the obstacles without telling the answers? (What mediation?)
- ▣ How does the subject respond to my mediation/help?
- ▣ How can I assess the possibility of transfer of rules, concepts, strategies, knowledge?

Interpretation Questions

- ▣ What was initial performance? High, low, consistent across problems..?
- ▣ What was the difference between initial performance and performance following mediation?
- ▣ What kinds of mediation, and how much of it, yielded performance improvement?
- ▣ What were the major obstacles to performance, and how can they be overcome?

The Flags Test

1. If flag number 1 were red and white, there would be one color too many. If that flag were green and white, there would still be one color too many. Flag number 1 is ---- _____.
2. If flag number 2 were green and gray, there would be one color too many. If that flag were green, yellow, and white, there would be two colors too many. Flag number 2 is _____.
3. If flag number 3 were blue and black, there would be one color too many. If that flag were black, red, and green, there would be two colors too many. Flag number 3 is -- _____.
4. If flag number 4 were yellow and blue, there would be one color too many. If that flag were blue and green, there would be one color too many. If it were red and blue, there would be one color too many. Flag number 4 is _____.
5. If flag number 5 were red, green, and yellow, there would be two colors too many. If that flag were yellow, blue, and black, there would be two colors too many. Flag number 5 is _____.
6. If flag number 6 were green, there would be two colors missing. If that flag were black, there would be two colors missing. If it were red, there would be two colors missing. Flag number 6 is _____.

17. If flag number 17 were green and blue, there would be one color missing. If that flag were black and green, there would be one color missing. If it were black and blue, there would be one color missing. Flag number 17 is _____.

18. If flag number 18 were black and green, there would be one color too many and one color missing. If that flag were yellow and red, there would be one color too many and one color missing. If it were black and red, there would be two colors too many and two colors missing. Flag number 18 is _____.

19. If flag number 19 were green and yellow, there would be two colors too many and one color missing. If that flag were blue, red, and green, there would be two colors too many. If it were yellow, red, and green, there would be two colors too many. Flag number 19 is _____.

20. If flag number 20 were green, black, and blue, there would be one color too many. If that flag were blue, red, and yellow, there would be two colors too many and one color missing. If it were black, yellow, and red, there would be two colors too many and one color missing. Flag number 20 is _____.

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2. April - June
3. Rolls - Toast
4. Robin - Swallow
5. Baseball - Football
6. Snow - Glacier
7. Tulips - Roses
8. Fly - Ant
9. Flashlight - Sun
10. Floor - Room
11. Snake - Iguana
12. Planet - Star
13. Cow - Chicken
14. Brain - Heart
15. String - Press
16. Mop - Vacuum cleaner
17. Lawyer - Doctor
18. Market - Kitchen
19. Jar - Box
20. Lake - River

1. Yellow - Brown - Green - Purple - Orange
2. April - June - February - July - September
3. Rolls - Toast - Biscuits - Muffins - Buns
4. Robin - Swallow - Eagle - Chickadee - Cardinal
5. Baseball - Football - Tennis - Bowling - Golf
6. Snow - Glacier - Iceberg - Sleet - Hail
7. Tulips - Roses - Carnations - Lilies - Violets
8. Fly - Ant - Grasshopper - Mosquito - Bee
9. Flashlight - Sun - Match - Lamp - Moon
10. Floor - Room - Chimney - Roof - Wall
11. Snake - Iguana - Alligator - Chameleon - Crocodile
12. Planet - Star - Sun - Comet - Moon

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PROVERBS, Form A

1. *No use crying over spilled milk.
You can't un-ring the bell.
 - ▣ No use locking the barn door after the horse has been stolen.

2. Beauty is only skin-deep.
*Don't judge a book by its cover.
All that glitters is not gold.

3. *Actions speak louder than words.
Deeds are fruits; words are but leaves.
The tree is known by its fruit.

4. *Let sleeping dogs lie.
Never trouble trouble till trouble troubles you.
Don't rock the boat.

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DA as a Research Tool

- ▣ One often wishes to assess maximal performance rather than typical performance (e.g., in neuropsychological assessment).
- ▣ Some important questions regard *change* and the conditions associated with it.

Examples of DA as Research Tool—not Research *on* DA

- ▣ Gordon & Haywood, et seq.: MR/DD, Verbal Abstracting
- ▣ Sclan: Psychopathology
- ▣ Heinrich: Neuropsychology
- ▣ Haywood & Miller: TBI
- ▣ Tzuriel et al.: Transculturality

DA as Research Tool in Study of Psychopathology (Sclan, 1986)

- ▣ Ss were paranoid and non-paranoid schizophrenic patients
- ▣ Tasks: TVA (verbal abstracting); RSDT (stencil design), given before and after mediation of cognitive/metacognitive strategies
- ▣ NP pts made more errors on both tasks
- ▣ P pts, even though higher initial scores, gained more from interposed mediation than did NP
- ▣ P pts “made their large differential gains principally .. on items that required more sophisticated cognitive processes; i.e., the more cognitively complex and difficult the task, the greater the benefit of mediation for the P pts.”
- ▣ Demonstrates the power of DA to reveal differences in ability to profit from instruction/intervention

GROUP DYNAMIC ASSESSMENT OF ADULTS WITH TRAUMATIC BRAIN INJURIES

H. Carl Haywood
Vanderbilt University, and
Martin B. Miller
Hudson Valley (NY) Community Services and
Programs

Subject Characteristics: Group DA/TBI Study

- ▣ 45 adults, both men and women
- ▣ ≥ 8 years post trauma
- ▣ Served in day program of CP Associations
- ▣ Moderately and severely impaired functioning, moderate dependency
- ▣ 21 in experimental group, 24 controls

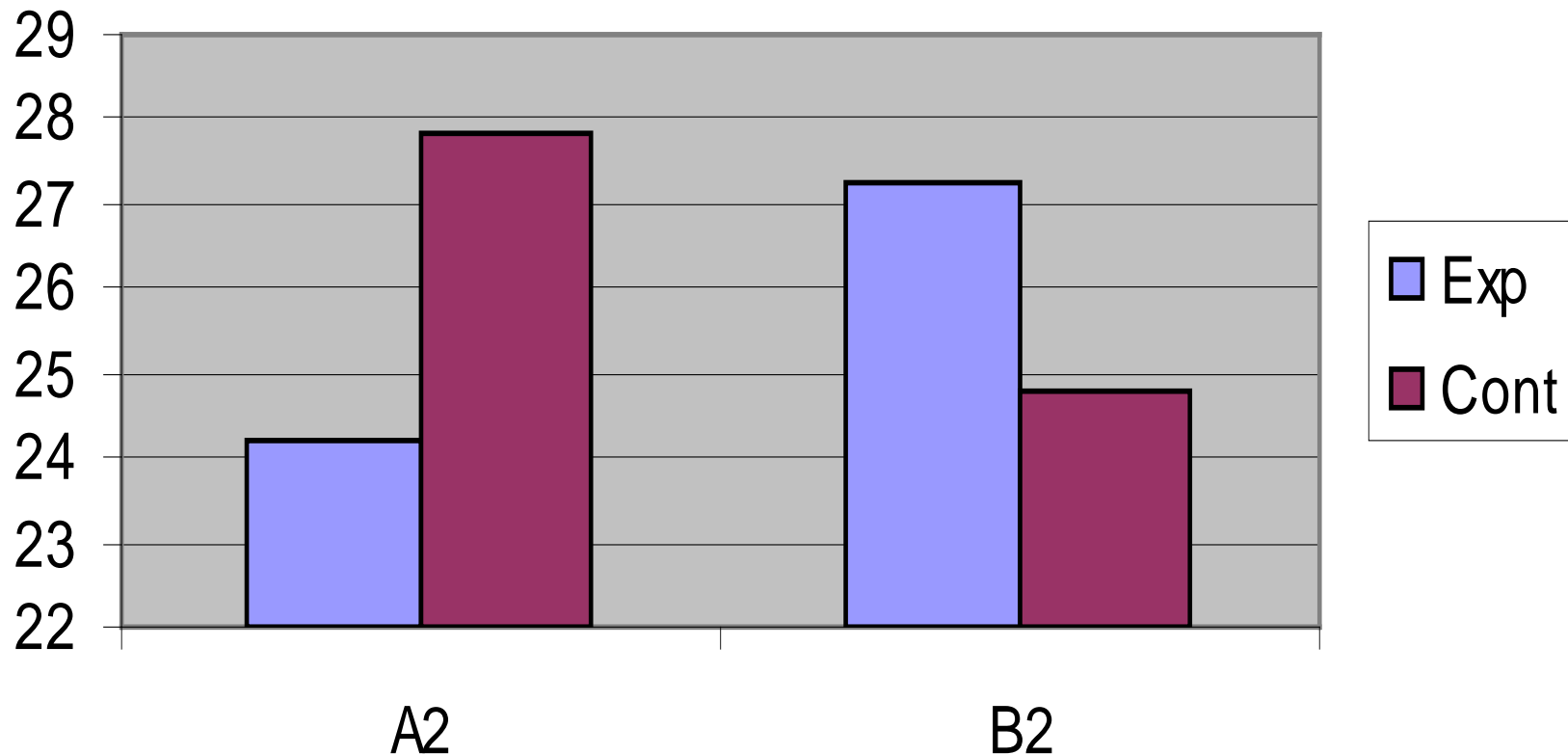
Questions asked in this study

- ▣ With the mediation that is part of DA, is it possible to improve the performance of adults with TBI?
- ▣ Are improvements in performance associated with domain of functioning?
- ▣ Is GROUP dynamic assessment possible with adults with TBI?

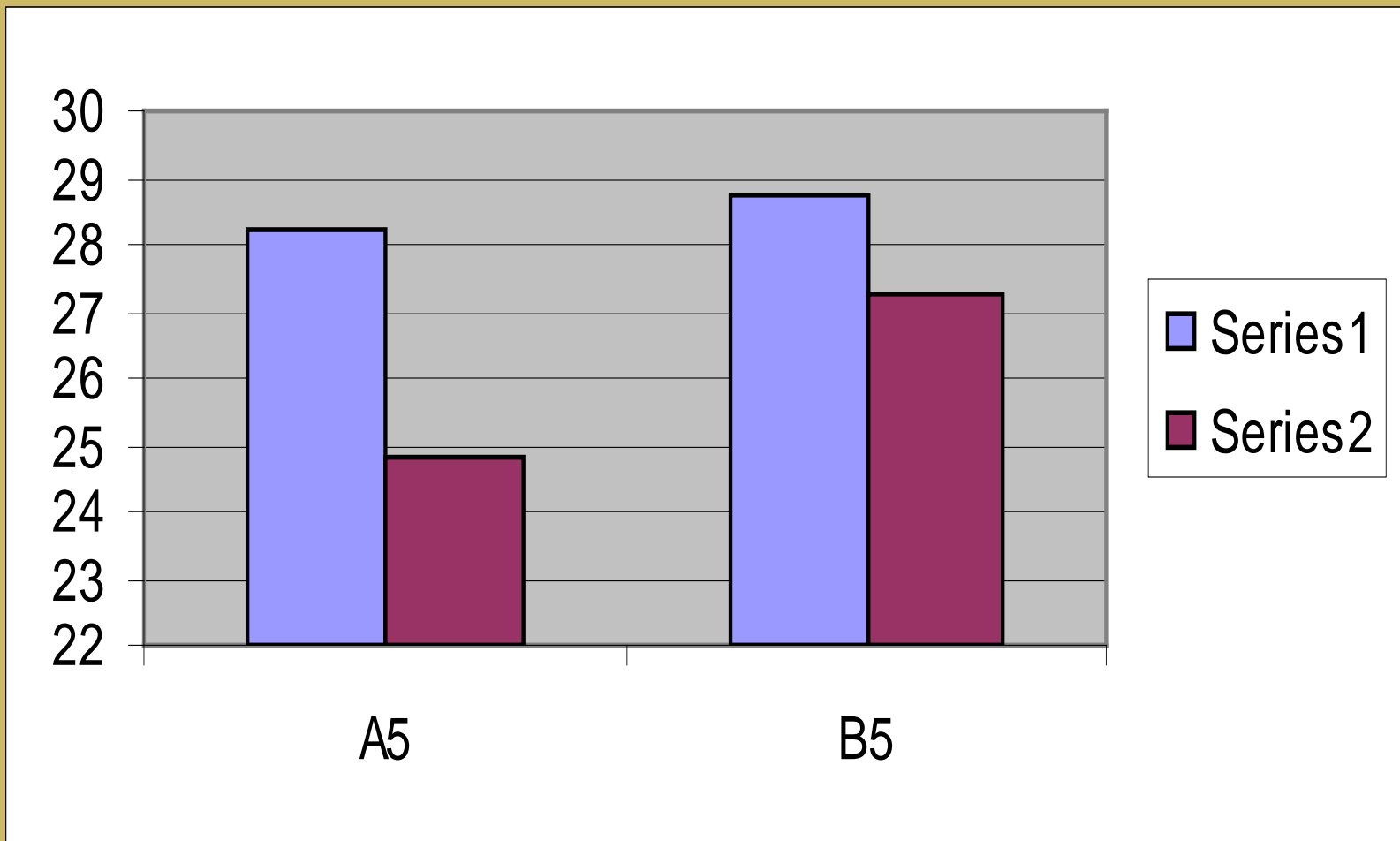
Tests/Tasks Used in DA

- ▣ Test of Verbal Abstracting (TVA; Haywood)
- ▣ Test of Verbal Memory, free recall
- ▣ Complex Figure (Rey)
- ▣ Representational Stencil Design Test (RSDT; Feuerstein)

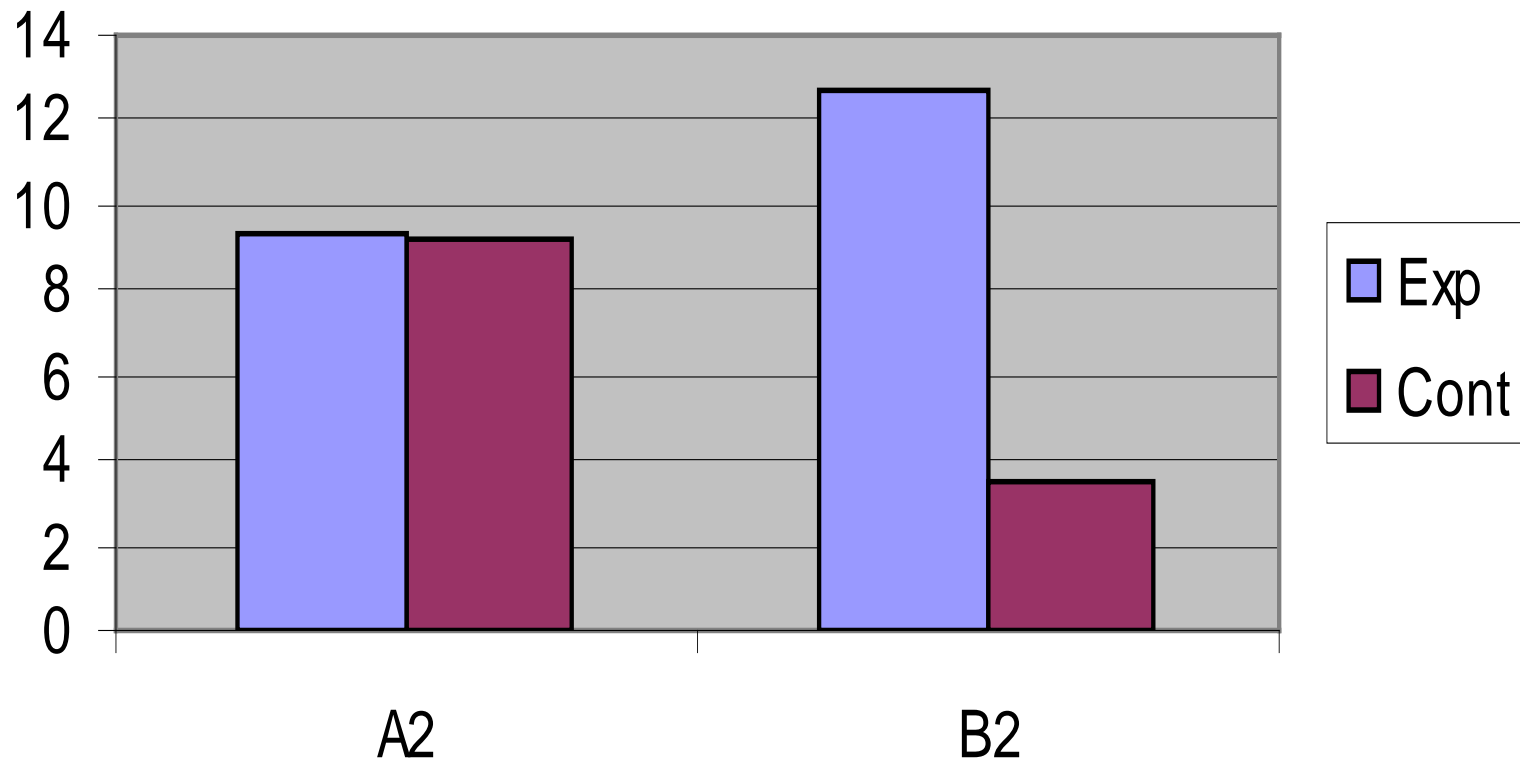
TVA: Effects of Mediation



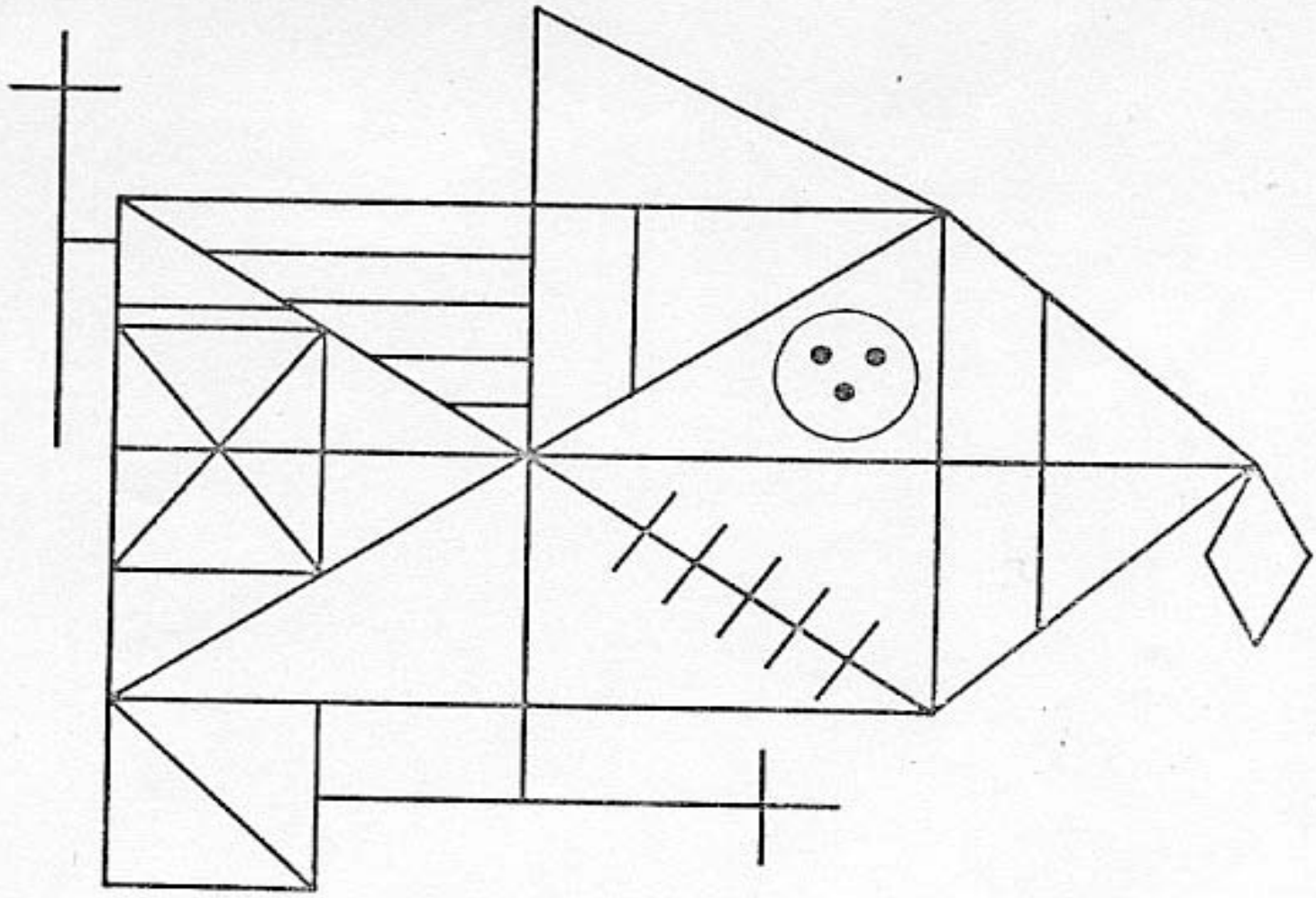
TVA: Effects of Mediation Plus Verbal Enrichment



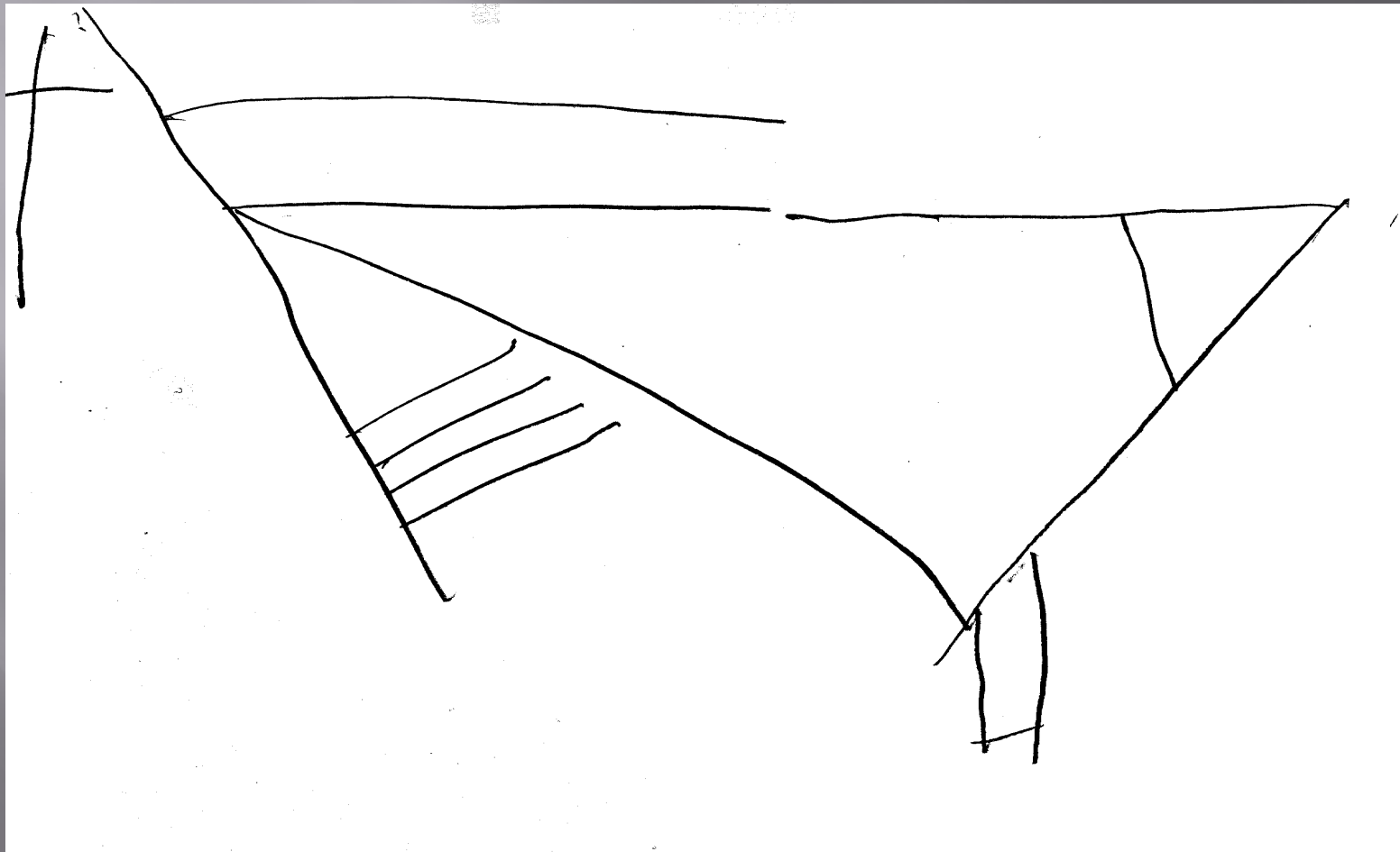
TVA Memory: Effect of Mediation



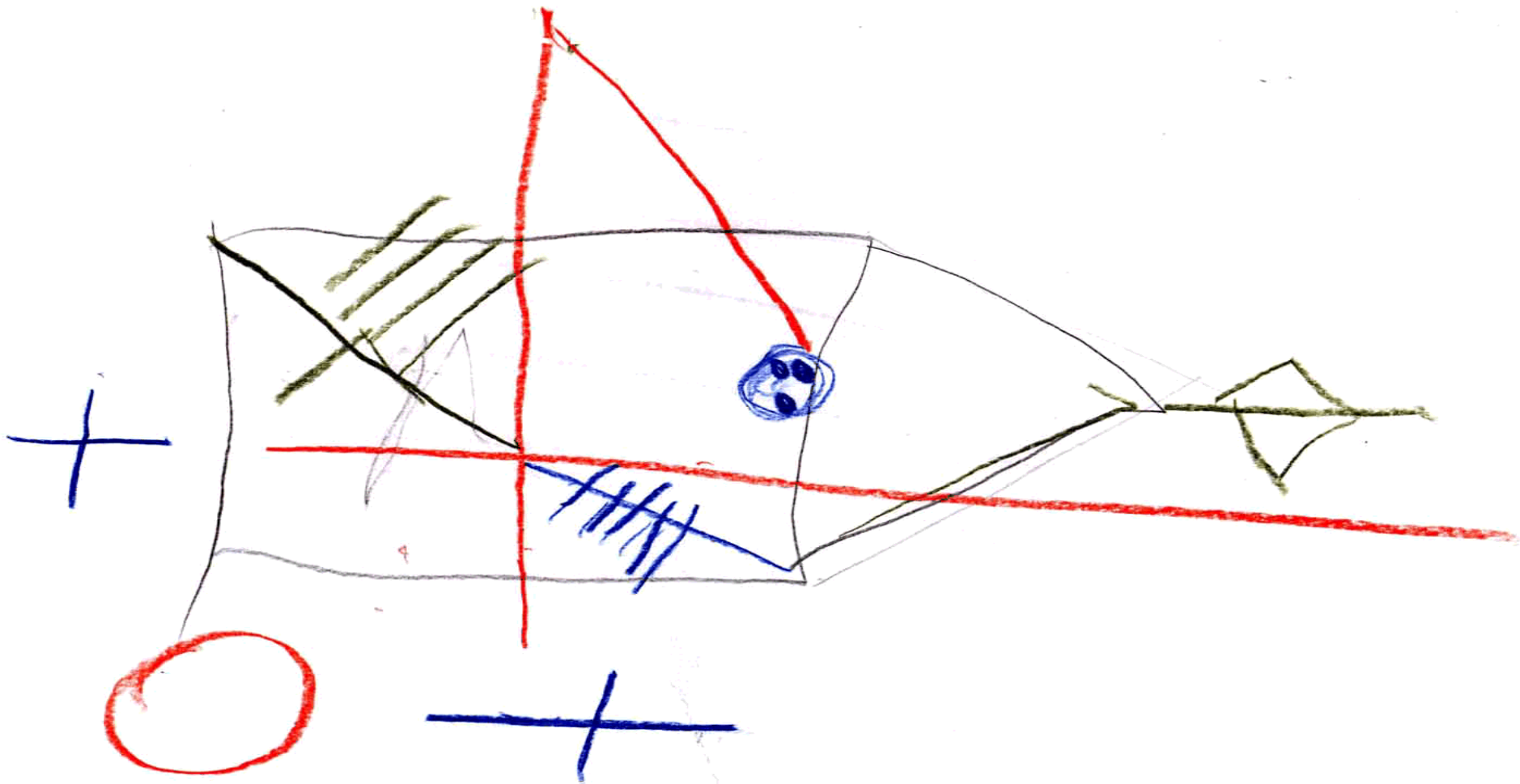
André Rey's Complex Figure



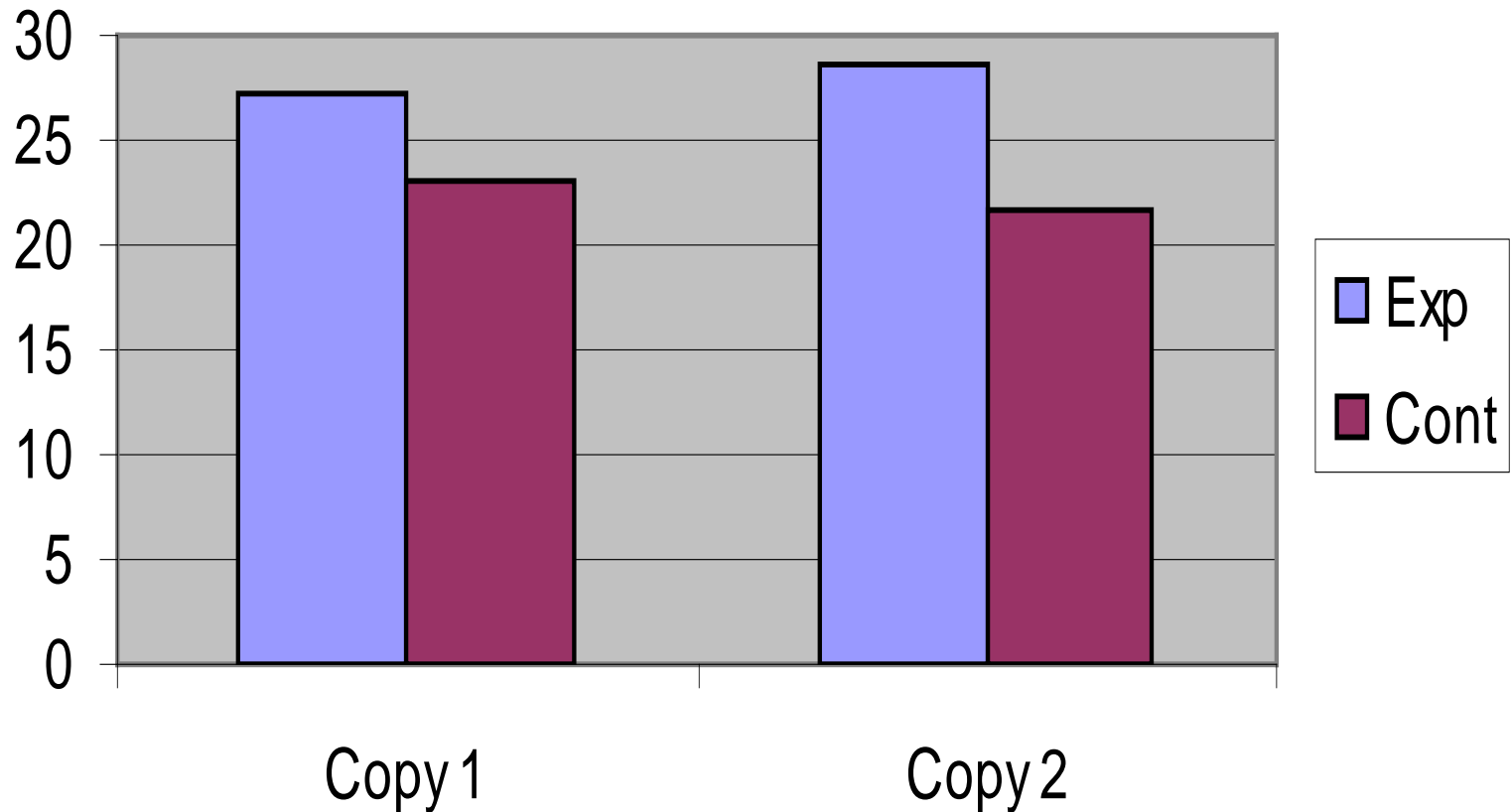
Complex Figure fm Memory, Adult with TBI



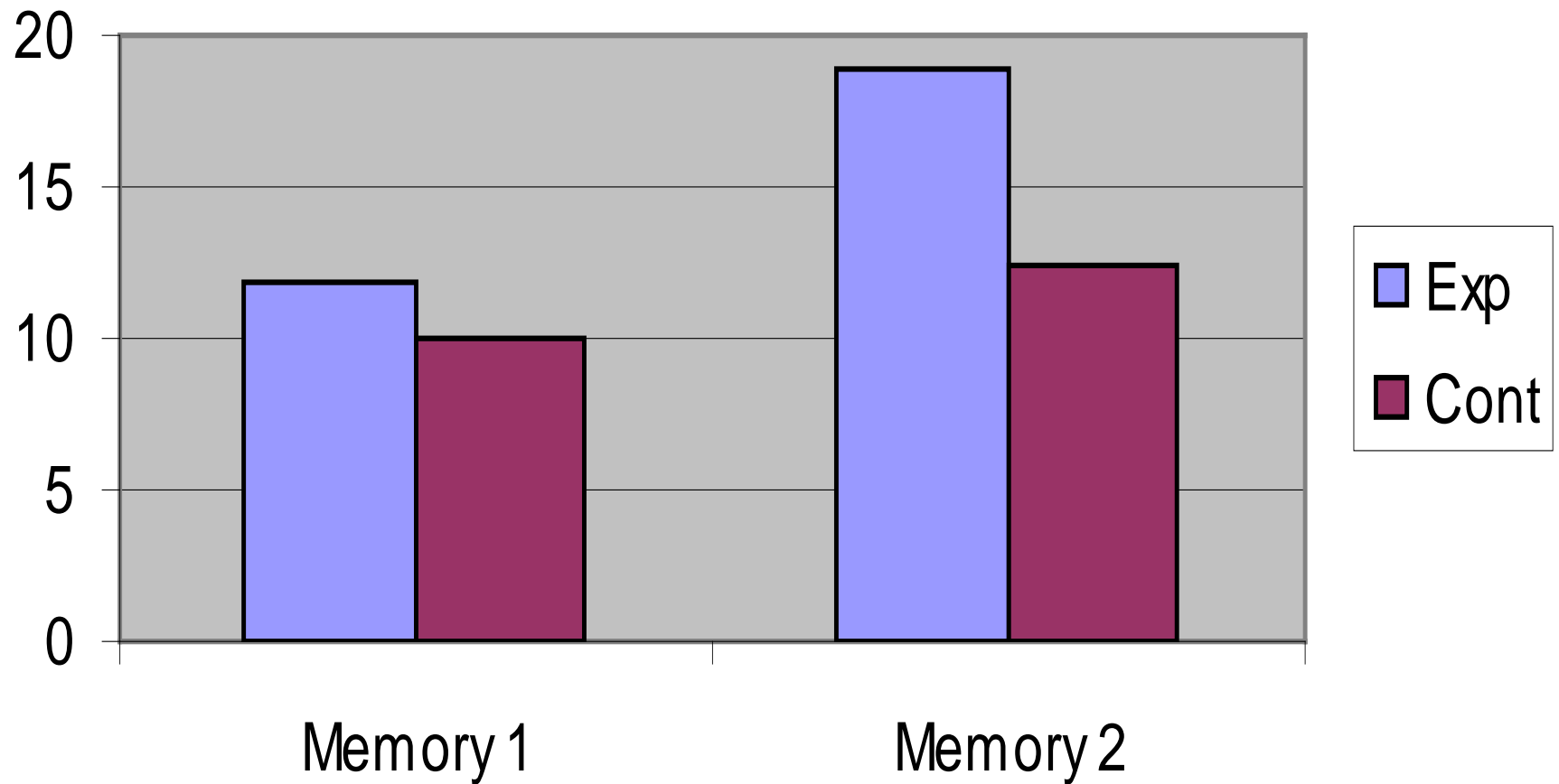
Copy from Memory after Mediation



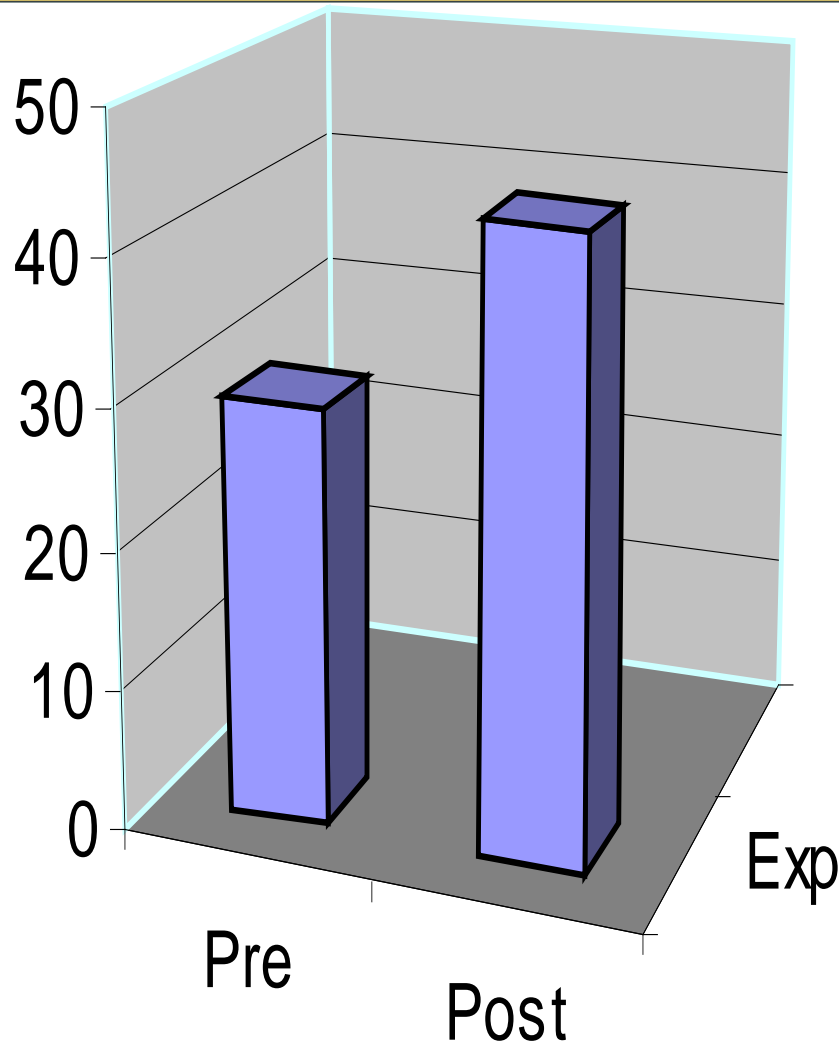
Complex Figure: Effect of Mediation on Copying



Complex Figure: Effect of Mediation on Copy from Memory



RSDT: Effect of Mediation (experimental group only)



Topics for 35-hr Workshop

- ▣ Nature of Human Ability
- ▣ Theoretical Bases of DA
- ▣ Assessing Across Domains of Functioning
- ▣ Assessment at Different Ages
- ▣ Variety of Assessment Instruments and Materials
- ▣ The Nature of the Interposed Intervention
- ▣ Sources of Information Gained from DA
- ▣ Interpretation, Reporting, Consultation
- ▣ Research, both with and about DA

More on Dynamic Assessment

- ▣ www.dynamicassessment.com
- ▣ H. C. Haywood & C. S. Lidz (2007). *Dynamic assessment in practice: Clinical and educational applications*. New York: Cambridge University Press.
- ▣ C. S. Lidz & J. Elliott (Eds.) (2000), *Dynamic assessment: Prevailing models and applications*. Amsterdam: JAI/Elsevier.
- ▣ H. C. Haywood & D. Tzuriel (Eds) (1992). *Interactive Assessment*. New York: Springer.
- ▣ Feuerstein, R. et al. (1979). *Dynamic assessment of retarded performers*. Baltimore: University Park Press. Revised 2002 and published by ICELP Press, Jerusalem.

More on Dynamic Assessment

- ▣ Haywood, H. C. & Tzuriel, D. (2002). Applications and challenges in dynamic assessment. *Peabody Journal of Education*, 77(2), 40-63.
- ▣ Lidz, C. S. (Ed.) (1987). *Dynamic assessment: An interactional approach for evaluating learning potential*. New York: Guilford Press.
- ▣ Lidz, C. S. (1991). *Practitioner's guide to dynamic assessment*. New York: Guilford Press.