A Sober Assessment of Response Bias: Can it be Avoided
(in Examiners, Examinees and Examinations)
and What does it really mean?

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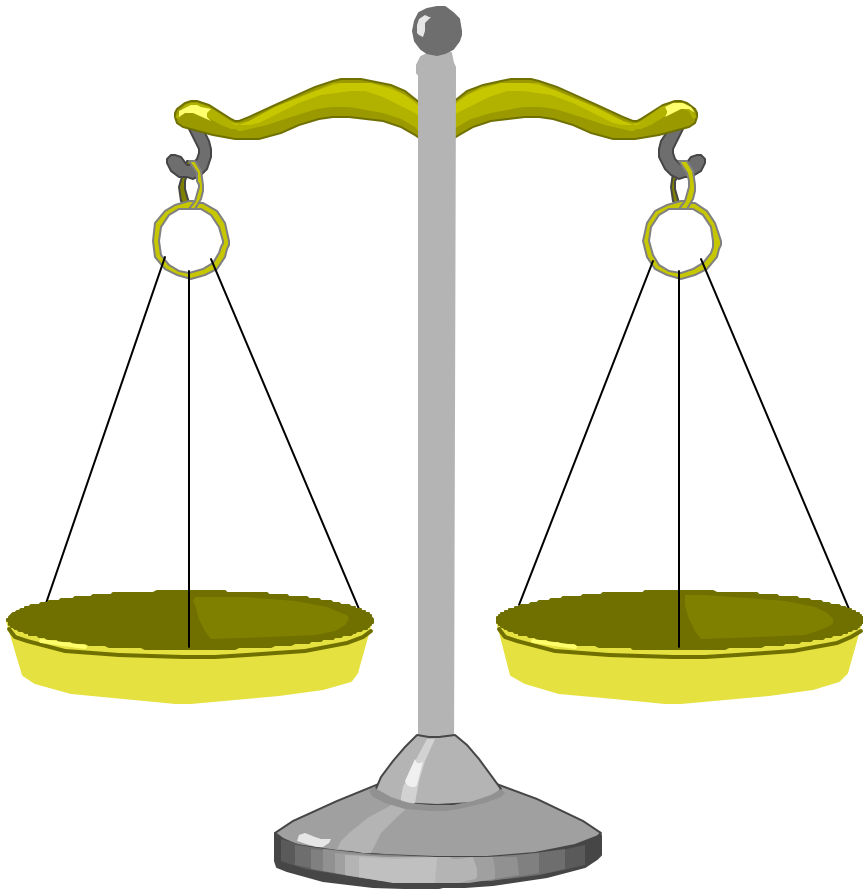
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Adversarialism
vs
Science

Compensation and Injury:

Longitudinal study of personal injury litigants in MVA's (Evans, 1994)

- Strongest predictors of successful outcome were
  - Inclusion of psychological services in the Tx plan
  - Receipt of immediate intervention, with return to work (RTW) treatment focus
  - RTW at reduced status or modified duties
- >= 6 months: uncooperativeness and delayed bill paying of medical insurance carriers (vs. medical symptoms) was most frequently reported stressor.
- Insurance carrier bill payment very strongly predicted RTW
  - Prompt (<=30 days): 97% had returned to work.
  - Delayed (> 90 days): 4% had returned to work.

Compensation and Injury (cont)

Incidence and Speed of Claim closure of Whiplash injury after change to no-fault in Saskatchawan Canada (Cassidy, et al, 2000)

- **Claims dropped by 28%**
- **Time to claim settlement was cut by 54%.**
- **Intensity of neck pain, level of physical functioning, depressive symptoms, having attorney increased claim closure for both**
- **Conclusion: Compensation for pain and suffering increases frequency, duration of claims and delays recovery**
- **Note: No-fault system eliminated most court actions, income replacement and medical benefits were increased and medical care became universal, without barriers**
  - **Pre-injury anxiety was associated with delayed claim closure only under the tort system**
- **New Conclusion: removal of financial disincentives and medicolegal associated treatment barriers has a facilitative effect on post-injury recovery.**

We See What We Look For,
## We Look For What We Know

Goethe

◀ Survey of Attitudes Regarding Workers Compensation (W.C.)

|	Disability Evaluating Professionals (N=27)	Medical Psychology Service Staff (N=7)	Case Managers (N=16) ; 7 W.C.
Question			
1: % of Injured Workers Who Exaggerate/ Malinger	19.2	24.7	28.5
2: % Injured Worker that W.C. Insurance Treats < Fairly	49.2	62.5	23.2
3: % Employers Who Treat Injured Workers < Fairly	53.5	41.2	32.7
4: Likelihood Employer Would Treat You (if injured) < Fairly	43.75	54.2	46.4
5: Likelihood W.C. Would Treat You (if injured) < Fairly	60	65.9	48.9
IV-3: Sex	66% Female	57% Female	100% Female

The doctor:

- ✓ Spent only one half hour with me and stuck me with a technician
- ✓ and talked mostly about why I didn't think I could work and if I ever went out on disability before, or if I was emotionally disturbed
- ✓ ...but spends hours and hours with the big shot decision makers
- ✓ ...and spent more time giving me trick (malingering) tests than talking with me
- ✓ ...and wrote a report that let SSD deprive me of the disability I deserve
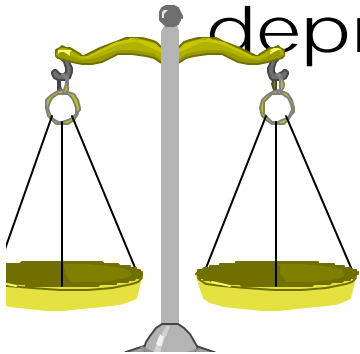
The Federal Judiciary Center Study (2000)

Johnson, M.T., Krafka, C. and Cecil, J.S. Expert testimony in federal civil trials: a preliminary analysis. Federal Judicial Center, 2000.
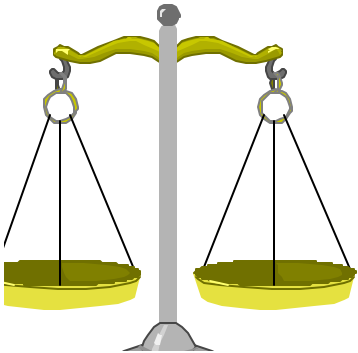
Diagnostic Realities in Assessment of Impairment and Disability

Real Disorder (e.g., Pain, TBI)

1. Yes
2. Mixed
3. Indeterminate
4. No

Residual Functional Impairments

1. Yes & Exaggerated
2. Yes & Not Exaggerated
3. No & Exaggerated
4. No & Not Exaggerated

Residual Testing Impairments

1. Yes & Not Exaggerated
2. Yes & Exaggerated
3. No & Exaggerated
4. No & Not Exaggerated

$$4 \times 4 \times 4 = 64$$

10+ SCIENCE RETARDANT MYTHS IN PAIN ASSESSMENT

- **Myth #1: We Know What Pain Is**
- **Myth #2: Pain is Either in the Body (organic) or in the Mind (functional)**
- **Myth #3: Medical science will solve the problem of pain and suffering...or All pain has a physical/neurobiological substrate that will be amenable to biologic intervention...**

10+ SCIENCE RETARDANT MYTHS (cont.)

- **Myth #4: We Know What Our Tests and Examinations Measure**

- **Myth #5: We Have Reliable Tests and Exams that are Specifically Senstitive to Organic Vs. NonOrganic Conditions**

- **Myth #6: Patient Self Report of Pain Complaint (Cognitive, Emotional) Status and Change Is Reliable When Malingering Can Be Ruled Out**

10+ SCIENCE RETARDANT MYTHS (cont.)

- **Myth #7: Low Scores on Performance/ Ability Tests Constitute Real Impairment**

- **Myth #8: Response Bias and Malingering Can be Reliably Detected**

- **Myth #9: Tests are Ecologically Valid**

- **Myth #10: Emotional Distress/ Depression / Cognitive Impairment / Chronic Stress / Sleep Deprivation / Fatigue... Do Not Produce Pain**

10+ SCIENCE RETARDANT MYTHS (cont.)

- **Myth #11: If There is No Discernible Organic Basis Then Pain must be "Functional"**

- **Myth #12: We Understand Pain Generators**

- **Myth #13: Pain is Psychogenic or Pain is Not Psychogenic**

- **Myth #14: Psychological disturbance in Chronic Pain Patients is Causal Vs. Reactive**

10+ SCIENCE RETARDANT MYTHS (cont.)

- △ **Myth #15: If There is a Psychological Component, It is All in Your Head**

- △ **Myth #16: Chronic Pain Patients are Malingering**

- △ **Myth #17: Psychological Treatments are Not Helpful for Real (organic) Pain**

- △ **Myth #18: Because psychological factors may be associated with onset, maintenance, exacerbations, severity etc., means that it is not a real**

10+ SCIENCE RETARDANT MYTHS (cont.)

- **Myth #19: Functional Neuroimaging Will allow us to Unlock the Secrets of Pain.**

- **Myth #20: Narcotic Use Causes Addiction (or It Does Not)**

- **Myth #21: PAIN DOES NOT CAUSE COGNITIVE PROBLEMS**

- **Myth #22: All of the Patients Problems are Because of the Accident and Pain**

- **Myth #23: Pain is Composed of Separable Components** (e.g., sensory-discriminative; motivational- evaluative)

EXAMINING PATIENT BIASES

- ◼ **ATTRIBUTIONAL BIASES**
  - ▲ **MIS / OVER-ATTRIBUTION**
    - ▶ **Retrospective Attribution**
    - ▶ **Correlational Attribution**
    - ▶ **Vigilance Biases**
    - ▶ **Inventory Biases**
  - ▲ **OPERANT BIASES**
    - ▪ **General Consequences**
      - – **Cancer Versus Mild TBI**
    - ▪ **Compensation Bias**
      - – **Denial Versus Vigilance** *(volitional and not)*
      - – **Adversarialism**
    - ▪ **Murphy's Law Bias**

PATIENT BIASES

- ◻ **RESPONSE BIAS**
  - ▲ **DENIAL**
  - ▲ **UNAWARENESS**
  - ▲ **SYMPTOM MINIMIZATION**
  - ▲ **SYMPTOM MAGNIFICATION**
  - ▲ **MALINGERING**
    - ■ **Reactive Adversarial Manlingering**
    - ■ **Desperation Malingering**
    - ■ **Sociopathic or Opportunistic Mal.**
  - ▲ **DISTRESS Profile / PLEA for HELP**

Specific Impediments to Adaptation that Can Increase Likelihood of Response Bias

- Anger or Resentment or Perceived Mistreatment
- Fear of Failure Or Rejection (e.g. damaged goods; fear of being fired after injury)
- Loss of Self-confidence and Self-efficacy associated with Residual Impairments
- External (health, pain) Locus of Control
- Fear of Pain (*Kinesophobia, Cogniphobia*) Re-injury / Exacerbation of Injury
- Discrepancies between Personality / Coping Style Behaviors and Injury Consequences

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Impediments *(cont.)*

- **Insufficient Residual Coping Resources / Skills**
- **Disuse Atrophy**
- **Fear of Loosing Disability Status, Benefits, Safety Net**
- **Perceptions of High Compensability for injury**
- **Preinjury Job (task, work environment) Dissatisfaction**
- **Collateral Injuries (especially if "silent")**
- **Inadequate and/or or Inaccurate Medical Information**
- **Mis- or Late diagnosis and Mis- or Late Treatment**
- **Dichotomous (organic vs. psychologic) Conceptualizations of injury and symptoms**

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Kinesiophobia

- Derived in response to observations by health care treatment specialists of significant avoidance responses in the treatment of chronic back pain
- Defined as the unreasonable or irrational fear of pain and painful reinjury upon physical movement.
- Phobic responses to pain (or pain phobias), as unhealthy pain maintaining habits, are a major contributor to pain related disability.

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Cogniphobia

- **Cogniphobia was subsequently proposed as an unreasonable or irrational fear of headache pain or painful reinjury upon cognitive exertion.**

- **The C-Scale (Todd, Martelli & Grayson, 1998) is designed to assess anxiety based avoidant behavior with specific regard to cognitive exertion.**

- **C-Scale approximate equivalent to the K-scale applied specifically to assessment of ACPRD in cases of head and neck pain.**

Other Comon Sources & Types of Response Bias

- **1) Cultural Differences** (e.g., less Western Mind-Body Dualism outside the US, and many Middle Easterners mix emotional and physical pain and symptoms at a conceptual and phenomenological level; Many non-Christian cultures see failure to impose severe penalty / extract significant compensation for harm as a sign of weakness and disgrace in God's eyes.)

- **2) RAM - Reactive Adversarial Malingering (RAM) based on fear, mistrust of opposing side honesty, mistreatment** (e.g., from assumed "facts" in many work setting and cultures, including plaintiff attorney groups) resulting in a deliberate pendulum like overplaying of symptoms. This may be especially characteristic in persons / groups with tendencies toward suspiciousness, including immigrants and outcasts and outsiders and those who feel chronically underpriveleged.

- **3) Conditioned Avoidance Pain Related Disability (CAPRD)**, or, roughly, phobic or extreme anxiety reactions wherein any competence (or ability or activity) is associated with excessive, overwhelming demands for pain exacerbation from external sources, and expressed both above and below conscious awareness. Cogniphobia and kinesiophobia are two types.

Sources &Types of Response Bias *(cont.)*

- **4) Desperation Induced Malingering (DIM) or Desp. Induced Symptom Exaggeration (DISE) -** e.g., insecure immigrant workers, aging workers, tired workers, workers insecure about work changes, immigrants who tried introjection and feel resentful that they were not rewarded, persons who recently climbed back on the horse only to get knocked off again without belief they can climb back in the saddle one more time, workers fearing their own limited or declining abilities, real or imagined abuse from employers, family, etc., immigrants who feel rejected by the culture and feel entitled, immigrants who feel disillusioned because the new land was not everything they had hoped - i.e. those who believe this to be a viable solution to a desperate situation. Probably also included are those making desperate pleas for help and those who, upon confronting tests that seem different and maybe easier than the real life situations where they have probems, reduce effort to highlight their problems.

- **5) Sociopathic, Freeloading and Goldbricking Types (SFG's)!** These self explanatory styles can be found in all groups, with estimated frequencies of generally between 5 and 10% in the chronic pain populations (20% given compensation situations).

Sources &Types of Response Bias *(cont.)*

- **6) Passive Agressive or Impatient or Rebellious types,** who resent people who don't listen to them and believe them at face value, and resent imposed evaluations or doctor's visits, especially ones that examine psychological fnction o motivation. They may play games with doctors by witholding or undermining procedures or treatments, and may especially alter performance or play games on tests that seem non challenging or not face valid.

IMPORTANCE OF DETECTING RESPONSE BIASES

- **Accurate Diagnosis**
  - Appropriate Treatment Provision
    - ► Pain, Depression, PTSD, etc.
  - Timely Treatment Provision
  - Prevention of Iatrogenic Impairment, Chronic Impairment and Disability Reinforcement
  - Appropriate Legal Compensation Decisions

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RESPONSE BIAS: Hallmark Signs

- **I. Inconsistencies Between and Within**
  - ► **Reported Symptoms**
  - ► **Test Performance**
  - ► **Clinical Presentation**
  - ► **Known Diagnostic Patterns**
  - ► **Observed Behavior (in another setting)**
  - ► **Reported Symptoms & Test Performance**
  - ► **Measures of Similar Abilities (intertest scatter)**
  - ► **Items Within the Same Test (intratest scatter)**
    ...esp. when difficult items > easy items
  - ► **Different Testing Sessions**

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RESPONSE BIAS: Hallmark Signs

II. Overly Impaired Performance (vs. those with known impairment)

- **Very Poor Performance on Easy Tasks Presented as Difficult**
- **Failing Tasks That All But Severely Impaired Perform Easily**
- **Poorer Performance Vs. Norms For Similar Injury/Illness.**
- **Below Chance Level Performance**

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RESPONSE BIAS: Hallmark Signs

III. Lack of Pathognomic Signs

IV. Specific Signs of Exaggeration / Dissimulation / Malingering

- **MMPI/2: F, F-K, 'Fake Bad', Subtle vs. Obvious**
- **Avoidance Conditioning and Exaggeration Tests**
    - ► **Kinesiophobia & Cogniphobia Scales; PAB**
- **Response Bias / Malingering Detection Tests**
    - ► **15 Items, Digit Recognition, Word Memory Tests**

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RESPONSE BIAS: Hallmark Signs

V. Interview Evidence

- Non-organic temporal relationship of symptoms to injury
- Non-organic symptoms, or symptoms which are improbable, absurd, overly specific or of unusual frquency or severity (e.g., triple vision)
- Disparate examinee history/ complaints across interview or examiners
- Disparate corroboratory interview data versus examinee report

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RESPONSE BIAS: Hallmark Signs

- **VI. Physical Exam Findings**
  - Non-organic sensory findings
  - Non-organic motor findings
  - Pseudo-neurologic findings in the absence of anticpated associated pathologic findings
  - Inconsistent exam findings
  - Failure on physical exam procedures designed to specifically assess exaggeration and malingering

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RESPONSE BIAS: Hallmark Signs

- **VI. Physical Exam Findings (cont.)**
  - **Mismatch between:**
    - **Pain and temperature exam - central pain only**
    - **ROM measurements in different positions**
    - **Physiologic parameters with subjective pain reporting**
    - **Physiologic parameters with reported &/or observed task effort**
  - **Midline sensory deficits**
  - **Patchy sensory/non-dermatomal deficits**

RESPONSE BIAS: Hallmark Signs

VI. Physical Exam Findings (cont.)

- Disparity between Observed behaviors in Exam context versus Non-exam context
- Gait disturbance forward but not otherwise
- Give-away weakness
- Non-anatomic referred pain complaints
- Special tests: Hoover's Test, Bilateral Stimulation for sensory deficits, etc.
- Special procedures: dolorimetry, surface EMG, surface temperature

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General Approaches to Response Bias and Invalid Performance Measurement

- **1) Symptom Validity Testing**
  - Easy Presented as Hard
  - Forced Choice
  - Refined Measures
    - Word Memory Tests
    - Word Stem Completion Tests
- **2) Invalid Test Performance Patterns**
  - WMS-R: Att/Con - Memory Ratio
  - Digits Forward vs Backwards
  - CVLT Recognition
  - WCST Perseverative Errors
- **3) Extra Test Behavioral Observation**
- **4) Multiple Measure Indices**
- **5) True, Valid Assessment:** Confession, Surveillance

SOME MYTHS OF RESPONSE BIAS DETECTION

- **It is EITHER/OR** (Present/Not; Malingering/Not)

- **Clinicians Can Reliably Assess IT**

- **Symptom Validity Tests (SVT) Measure IT**

- **SVT's are Valid and Predict Real Test Performance** (extended myth: Real Tests Predict Real Life)

- **Patients Take our Exams Seriously**

- **Customary Psych/Neuropsych/Medical Testing is Adequate For Assessing IT**

Problems with Symptom Validity Measures

- **1) Poor Psychometric Research** (reliability, validity)
- **2) Variable Group Membership** (e.g., can have real disorder and exaggerate)
- **3) Limited Generalizability of analogue research** (i.e., simulated malingerers vs externally validated malingerers; cf studying serial killers this way)
- **4) Differential Vulnerability of Meaures** (from Hayes, et al, 1999)
- **5) Questionable Generalizabiliy of Findings** (i.e., from one SVT to any other (SVT or real) test, or to actual symptoms, or across time; conversely, good effort on a SVT...)
- **6) Absence of Mutual Exclusivity** (i.e., poor effort can occur in presence of real disorder, symptoms)

- **7) Law of the Instrument operational definitions wherein "malingering" becomes what malingering" tests measure.** (No definitions of "effort", multitrait, multimethod matrices, construct validity support? Assumed uniformity across diagnoses, litigation vs not, etc.)

- **8) Effects of Fatigue, Disinterest, Non-attended administration, Pain, on these measures have not even been addressed**

- **9) High False Positive Rates with both simulators, and real patients in large clinical samples**

- **10) Use of any current SVT / Index violates APA ethics and "APA Standards for Educational and Psychological Tests" with regard to diagnosis, decision making**

Problems with Symptom Validity Measures

- 1) Psychometric shortcomings (i.e., test construction issues such as inadequate reliability and validity data and not meeting professional standards for educational and psychological tests

- 2) Limited generalizability from findings on simulated malingerers (i.e., analogue research) to real malingerers;

- 3) Limited generalizability from one SVT to other SVTs or clinical tests in a battery;

- 4) Differential subtlety of measures;

- 5) Wide variability in research sample characteristics;

- 6) Confounding of exaggeration and real disorder in clinical groups;

- 7) Limited validation research on "effort" as a construct

- 8) Unknown specificity with regard to effects of fatigue, pain, disinterest, non-attended (computer) administration, etc.

- 9) Frequently high misclassification rates (i.e., false positives or false negatives), both experimentally and when tested clinically

Problems with Symptom Validity Measures
cont.

This summary of shortcomings should emphasize:

- 1) the need for caution in interpretation;

- 2) the importance of employing multiple data sources and making thoughtful inferences only after integration of behavioral observations, interview data, tests results, and collateral sources of information;

- 3) the need for further research.
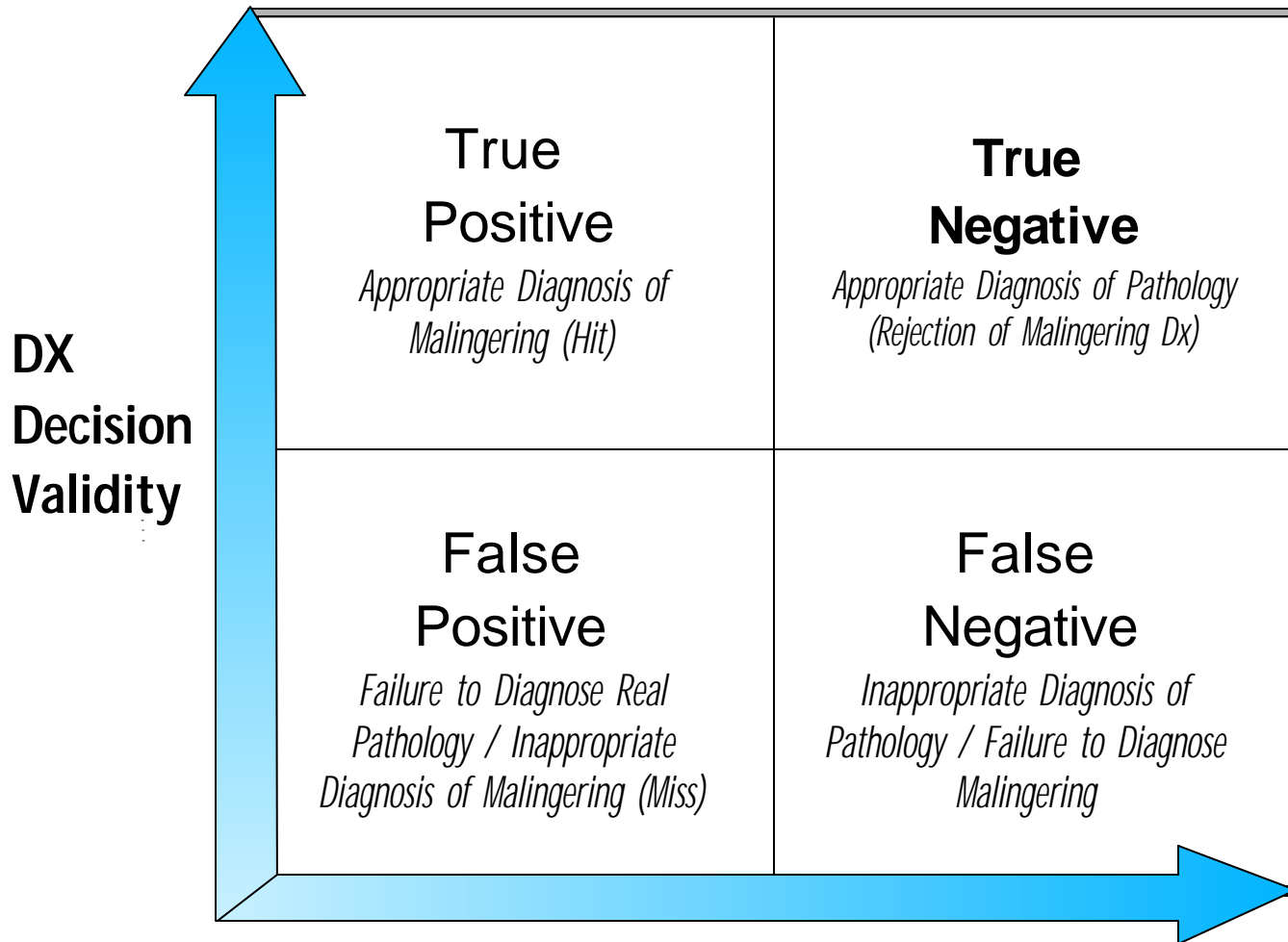
Problems with Symptom Validity Measures
cont.

- **Spector et al., 1999 Compared Performances Across Four Performance Pattern Indices (WAIS-R DS-Vocab; WMS-R Att - Mem; CVLT Recog-FreeRecal; SeashoreRhythmErr's) for:**

  - N=136 <u>Mod - Severe TBI</u>
    - **31% Failed 1 Measure**
    - **8% Failed 2 Measures**
    - **0% Failed 3 or 4**

  - N=105 "<u>presumptive malingerers</u>" in compensation seeking group
    - **83% Failed 3 or 4**
    - **100% Failed 2 or More**

The Solution??? See Next Page

Problems with Symptom Validity Measures
cont.

- **Curtiss, Vanderploeg & Vipperman (1999; in press) for N=244 Compared 8 Performance Pattern Indices to Report Baserates of Malingering in questionable to severe TBI**
  - **Only 2 of 8 had <= 10% False Positives (WMS-R; WCST)**
  - **Review (med, chart, obs, etc.) of Index Classifed Malingerers:**
    - **Minimum 33% False Positive Rate for MTBI**
    - **nearly 100% FP rate for Mod- Severe TBI**
  - **Using >1 Index did not alter False Positive Rates across groups**
  - **CONCLUSION: Base Rate Findings indicate that "risk of falsely labelling someone as malingering is unacceptably high with all of the neuropsychological test indices, whether used individually, or in combination."**

Decision Making Theory:
Diagnostic Formulation of Malingering

DX Decision Validity

True Positive *Appropriate Diagnosis of Malingering (Hit)*	**True Negative** *Appropriate Diagnosis of Pathology (Rejection of Malingering Dx)*
False Positive *Failure to Diagnose Real Pathology / Inappropriate Diagnosis of Malingering (Miss)*	**False Negative** *Inappropriate Diagnosis of Pathology / Failure to Diagnose Malingering*

**Diagnostic Decision
Accept | Reject**

Considerations

- Consequences of False Positive vs. False Negative
- Cost and Availability of Treatment Resources
- Salience, Strength of Reward of Pathology Diagnosis

Perception Bias
(magnet)

- We see what we look for. We look for what we know.   - Goethe
- The theories we choose determine what we allow ourselves to see. - Albert Einstein
- We don't see things as they are, we see things as we are.   - Anais Nin
- When we don't even believe that something is possible or that it exists, we fail to see it at all. - Dorothy Otnow Lewis
- For every complex problem there is an easy answer... And it is wrong. - H. L. Menchen
- "The tendency to organize knowledge around a belief system, and then to defend that belief system against challenge, appears to be a fundamental human characteristic...."

Decision Making in Malingering Assessment

	Environ-mental Conditions	Diagnostic Conceptualization	Diagnostic Decision Result
	High vs. Low Reward for Clinical Diagnosis	Dichotomous (Black/White; Either/Or)	Less vs More frequent Diagnosis of Clinical Condition
	Limited Resources	Personal Responsibility / MedicoLegal	Less Diagnoses for Less Easy to Treat or Less Clear Cut
	Limited Resources	Medical & Medico Legal	Treat Those with Clear Organic Conditions and/or Only Organic Conditions, with Medical Tx's
	Limited Resources	Biopsychosocial	Treat Most Persons, and in a Holistic Manner
	Limited Resources (e.g, Managed Care)	Neurobehavioral Therapist / Program Competence	Treat Most Persons with Evolution of More Sophisticated, Efficient, Powerful Rehabilitation Interventions

MOTIVATION ASSESSMENT PROFILE

(MAP) M.F. Martelli, 1997

Indicator

- 1. Digit Span (Floor Effect)
- 2. Arithmetic scale and Orientation scale Performance
- 3. Finger Tapping Test
- 4. Tactual Stimulation Performance
- 5. Finger Tip Number Writing - Errors
- 6. Finger Agnosia - Errors
- 7. Grip Strength
- 8. Speech Sounds Perception Test
- 9. Seashore Rhythm Test

Cutoff

- 1. SS < 7 / 4
- 2. 'near-miss'' (Ganser errors).
- 3. Unusually low w/o gross motor deficit
- 4. Errors bilaterally vs. laterally
- 5. **> 5
- 6. *> 3
- 7. Unusually low w/o gross motor deficit
- 8. *>17 errors (Poor)
- 9. *>8 errors

MOTIVATION ASSESSMENT PROFILE

(MAP) M.F. Martelli, 1997

Indicator

- 10. WMS-R Malingering Index: Attentional Control Vs. Memory
- 11. Recognition memory (CVLT)
- 12. List Learning Serial Order Effects
- 13. Paired Associate learning: Easy vs. Hard item Performance
- 14. Word Stem Priming Task Performance
- 15. Digit Span Memory: Testing Limits "Chunking"
- 16. Rey Complex Figure and Recognition Trial

Cutoff

- 10. Attentional Control Score < Memory
- 11. *< 13
- 12. Abnormal patterns
- 13. Hard Items >= Easy Items
- 14. Poor or unusual performance
- 15. Non-improvement with "chunking"
- 16. Atypical Recognition Errors (>=2); Recognition Failure Error;

MOTIVATION ASSESSMENT PROFILE

(MAP) M.F. Martelli, 1997

Indicator

- **17. Remote Memory Report**
- **18. Wisconsin Card sorting Test Errors**
- **19. Catergories Test Performance**
- **20. Full Scale IQ**
- **21. General Neuropsych Deficit Scale (Reitan & Wolfson, 1988)**
- **22. Performance on any Validated Symptom Validity Tests**
- **23. Performance on Easy Tasks Presented as Hard**
- **24. Time / Response Latency Comparisons Across Similar Tasks**

Cutoff

- **17. Difficulties, especially if >= recent memory**
- **18. Discrepant # Persev. Vs #Category Errors**
- **19. Rare or "spike three" errors; Or > 1 Error I,II**
- **20. Low (vs. expected, estimated, etc.)**
- **21. **GNDS Score < 44**
- **22. Poor Performance - low scores and/or unusual performance**
- **23. Low scores or unusual errors**
- **24. Inconsistencies across tasks**

MOTIVATION ASSESSMENT PROFILE

(MAP) M.F. Martelli, 1997

Indicator

- **25. Symptom Self Report**
- **26. Comparisons for Inconsistencies Within Testing Session** (*Quantitative & Qualitative*):
- **27. Comparisons Across Testing Sessions (Qualitative, Quantitative)**
- **28. Patient Symptom Complaint Vs Sifnificant Other**
- **29. Symptom Self Report: Early vs. Late Symptoms**
- **30. Inconsistencies in History Complaints, Performance**

Cutoff

- **25. Discrepancies**
- **26. Within, Between Tasks**
  - ⚠ **Across Repetitions of same/parrallel tasks,**
  - ⚠ **Similar tasks under different motivational press**
- **27. Poorer or inconsistent performances on re-testing**
- **28. High # of complaints; patient complaints > significant others'**
- **29. Early Symptoms reported late**
- **30. Inconsistencies across time, interviewer, etc.**

ASSESSMENT OF PSYCHOLOGICAL MEDIATORS OF ADAPTATION:
A STRESS & COPING MODEL

- **INDIVIDUAL PATIENT VARIABLES**
  - **Comorbid Coping Vulnerabilities**
    - ▶ **PTSD**
    - ▶ **Reactive Depression, Anxiety, etc.**
    - ▶ **Associated Psychosocial Stresses**
  - **Premorbid Coping Vulnerabilities**

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Clinical Differentiation of Malingered Posttraumatic Stress Disorder (PTSD)

Symptom Expression	Genuine PTSD	Malingered PTSD
Relationship of Symptoms to Stressful Initiator	Minimized	Emphasized
Direction of Blame	Self	Others
Dream Themes	Helplessness or guilt	Grandiosity or power
Emotional Impact of Stress Initiator	Deny emotional impact	"Act out" alleged feelings
Elicitation of Stress Memories	Reluctant to tell memories	"Relish" telling memories
Quality of Guilt	survivor type related to specific incidents	Generalized type over more global survival
Response to Stress Initiator Associated Environments	Avoid	Do not avoid
Direction of Anger	Anger at helplessness	Anger at authority, life blocks, etc.

M.F.Martelli, Ph.D. (Adapted from Resnick, 1995)
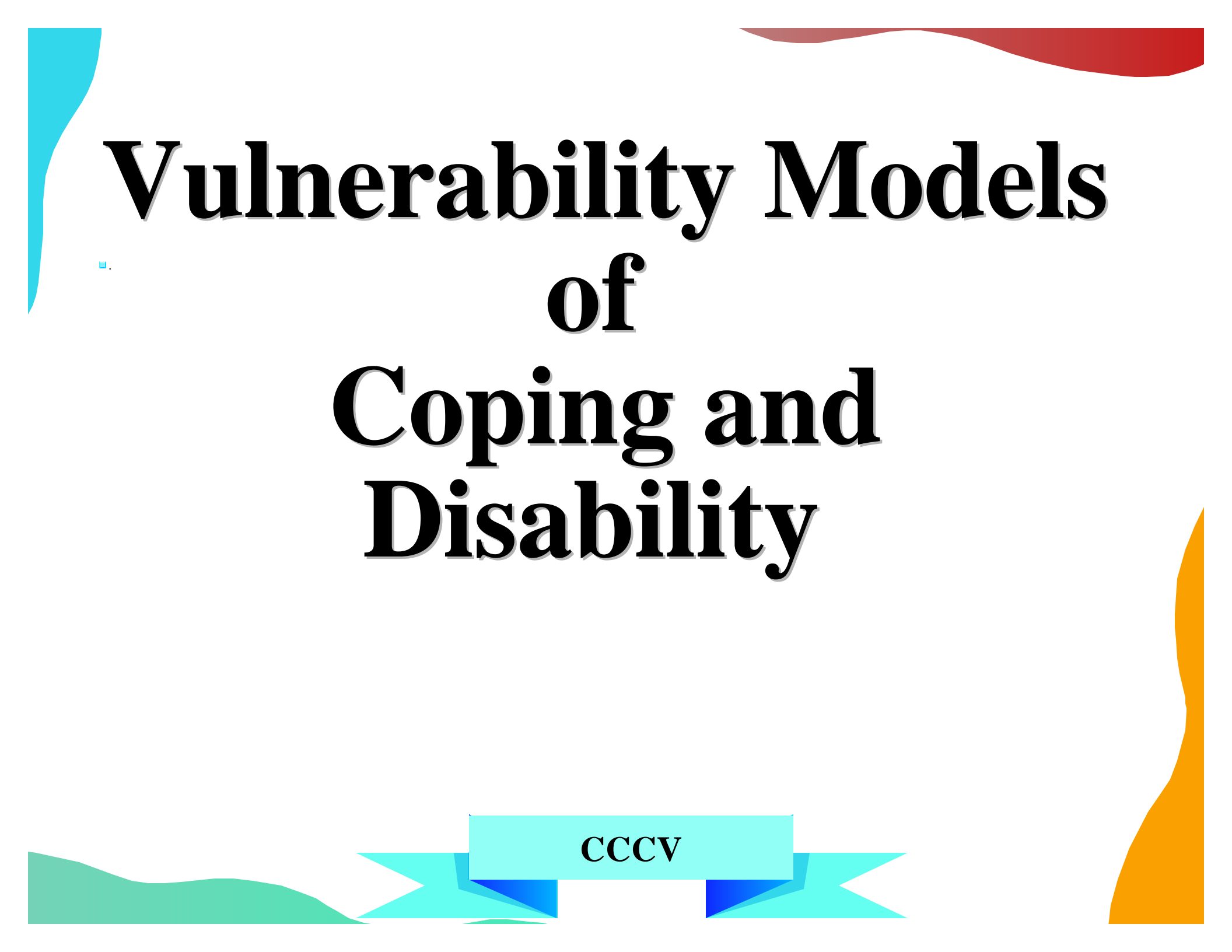
Simulated or Exaggerated Incapacity
(Main & Spanswick, 1995)

Features Primarily Suggestive:

- Failure to comply with reasonable treatment
- Report of severe pain with no associated psychological effects
- Marked inconsistencies in effects of pain on general activities
- Poor work record; history of persistent appeals against awards
- Previous litigation

Features Not Primarily Suggestive:

- Mismatch between physical findings and reported symptoms
- Report of severe or continuous pain
- Anger
- Poor response to treatment
- Behavioral signs / symptoms

Vulnerability Models of Coping and Disability

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The	Vulnerability	To	Rating	Scale	General Version
Increased Complaint Duration	**Complaint Inconsistency / Vagueness**	**Previous Treatment Failure**	**Collateral Injury / Impairment**	**Pre/ Comorbid Medical History**	**Medication Reliance**
0= <6Months	0=Little	0=Insignificant	0=Insignificant	0=Insignificant	0=Little
1= <12Months	1=Mixed	1=Mixed	1=Mild/Moderate	1=Mild to <Moderate	1=Moderate
2= >12Months	2=Mostly Inconsistent	2=Mostly or All Failures	2=Significant	2=Significant	2=Significant
Especially with expectation of chronicity, poor understanding of symptoms;	Multiple, vague, variable sites; anatomically inconsistent; Sudden onset without accident or cause; not affected by weather; performing no work or chores, or avoiding easy tasks but performing most hobbies, enjoyments; pain only ocassional;	Especially with complaint of treatments worsening pain or causing injury, and expectation that future treatments will fail;	Especially if silent and involving adaptation reducing impairments;	Seizure disorder; Diabetes; Hypertension; Brain injury or stroke or other neuro- logic insult or vulnerability (esp. if undiagnosed); Pre- injury medication reliance; Older; Etc.	>4X/Week Narcotic, Hypnotic or Benzo- diazepine tranquilzer; Perceived inability to cope without medication;
Severity of Current Psychosocial Stress	**Psychological Coping Liabilities**	**Victimization Perception**	**Social Vulnerability**	**Illness Reinforcement**	**VULNERA-BILITY SCORE**
0=Non-significant	0=Few	0=Little	0=Little	0=Little	
1=Mild/Moderate	1=Mild/Moderate	1=Mild/Moderate	1=Mild/Moderate	1=Mild/Moderate	_____ Total Points (Max: 22)
2=Significant	2=Significant	2=Significant	2=Significant	2=Significant	
Sum of Personal, Social, Financial, Emotional, Identity, Activity Stresses, Life Disruption, Premorbid Coping Style Disruption, etc. and including Injury/ Impairment X Coping style incongruence; Persistent premorbid psychosocial stress levels;	Premorbid, Comorbid: Depression; Post-Traumatic Anxiety; Somatization (& Repressive) Defenses; Emotional Immaturity/ Inadequacy With Poor Coping Skills; Hypochondriacal Traits (e.g., post-injury MMPI-3 > 85; preinjury > 70); Passive Coping Style; Childhoo	Externalized "Blame" for accident, disability, etc.; Percieved Mistreatment; Anger, Fear, Resentment, Distrust regarding accident, treatment, understanding (family, employer, doctors, etc - esp. given charactero- logic tendencies regarding victimization,	Lack of Family Support, Resources, Romantic Support (esp if recent conflict, divorce); Lack of Community Support / Resources / Involvement; Lack of Employer, Co-worker, Insurance Manger Support; Etc.	Secondary Gain: Attention, support in a dependency prone person; Avoidance of stressful or displeasing life or job responsibilities or demands (esp with recent or imminent job / job duty changes or reorganization); Financial Compensation (esp. if litigati	Preliminary Interpretive Guidlines Scores of 13 or Above Suggest High Vulnerability to Chronic Disability

Martelli, 1996

Impairment and Disability Models that Include Response Bias / Motivation Factors

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PTH IMPAIRMENT RATING
Packard & Ham, 1994

- **IMPAIRMENT: Each are scored from 0 to 2 points.**
  - ___Intensity
  - ___Medication use
  - ___Physical signs/symptoms
  - ___Adjustment
  - ___Incapacitation
  - ___Recreation
  - ___Miscellaneous activities of daily living
  - ___Employment
  - ___Number (frequency),
  - ___Time (duration of attacks).
    - _____Total IMPAIRMENT

PTH IMPAIRMENT RATING
Packard & Ham, 1994

- **Physician Modifiers [0 to -4 for each]**
  -       0-   1 or-2   -3 or -4
  - **M**   good   fair   poor
  - **O**   none   mild   marked
  - **D**   minor   some   major

- ____ **M**otivation for evaluation and treatment
- ____ **O**verexaggeration/ incapacitation or family overconcern
  (*out of proportion to findings*
- ____ **D**egree of legal interest by patient and/or family.

                   Total MODIFIERS Score: _____

- **IMPAIRMENT SCORE:** _____
- **- Total MODIFIERS Score:** _____ (subtract)
- **= IMPAIRMENT RATING:** _____

PAIN IMPAIRMENT RATING
NADEP Adaptation Exercise, 1998

■ **IMPAIRMENT: Each are scored from 0 to __ points.**

▲ ___Intensity

▲ ___Medication use

▲ ___Physical signs/symptoms

▲ ___Adjustment

▲ ___Incapacitation

▲ ___Recreation

▲ ___Miscellaneous activities of daily living

▲ ___Employment

▲ ___Number (frequency),

▲ ___Time (duration of attacks).

■ _____Total IMPAIRMENT

PAIN IMPAIRMENT RATING
NADEP Adaptation of Packard & Ham, 1998

- **Physician Modifiers [0 to -4 for each]**
    -             0-   1 or-2   -3 or -4
    - **M**   good   fair   poor
    - **O**   none   mild   marked
    - **D**   minor   some   major

- ___ **M**otivation for evaluation and treatment
- ___ **O**verexaggeration/ incapacitation or family overconcern
    (*out of proportion to findings*
- ___ **D**egree of legal interest by patient and/or family.

    Total MODIFIERS Score: _____

  - **IMPAIRMENT SCORE: _____**
  - **- Total MODIFIERS Score: _____** (subtract)
  - **= IMPAIRMENT RATING: _____**

SCREENING FOR NON ORGANIC RESPONSES: Wadell Signs

- **1. Overreaction**
  - Guarding/limping, bracing, rubbing affected area, grimacing, sighing
- **2. Tenderness**
  - Widespread sensitivity to light touch of superficial tissue
- **3. Axial Loading**
  - Light pressure to skull of standing patient should not significantly increase low back symptoms

NON ORGANIC RESPONSES:
Wadell Signs *(continued)*

- **4. Rotation**
  - ▲ Back pain is reported when shoulders and pelvis are passively rotated in the same plane

- **5. Straight Leg Raising**
  - ▲ Marked difference between leg raising in the supine and seated position

- **6. Motor and Sensory**
  - ▲ Giving way or cog wheeling to motor testing or regional sensory loss in a stocking or non dermatomal distribution (rule out peripheral nerve dysfunction)

NON ORGANIC RESPONSES
(continued)

- **Additional Non Organic Signs include:**
  - Lower extremity giving way
  - No pain-free spells in past year
  - Intolerance of treatments
  - Emergency admissions to hospital with back trouble

Mensana Clinic Test Discrimination Success: "Organic" versus "Functional" Back Pain

$$(X^2 = 133: p<0.0001)$$

Physical Findings

	Objective	Mixed	Exaggerating
3	**146/155 =** **94%**	**43/57 =** **75%**	**6/39 =** 15%
2 1 0	**9/155 =** 6%	**14/57 =** 25%	**33/39 =** 85%

0   Objective   17   Mixed   21   Exaggerating   30

Test Scores (Categories)

Mensana (Hendler) Back Pain Screen

Recommendations for Enhancing Validity in Pain Complaint Assessment

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Recommendations for Enhancing Validity in Assessments

- **Utilize instruments with built-in symptom validity measures: Most major objective personality measures; Neuropsychological measures such as Memory Assessment Scales (Williams, 1992) and the Rey Complex Figure Test and Recognition Trial (Meyers & Meyers, 1995) that provide simulator performance data.** Note: questionable ethics in administering and charging for very long tests designed solely for detection of potential motivation problems (esp if negative), with numerous generalization difficulties, protracted testing time and detracting from time for relevant measures and more comprehensive interview (examinee, collaborative others).

- **Develop instruments with built-in symptom validity measures.**

- **Develop built-in symptom validity measures for existing instruments.**

Recommendations for Enhancing Validity in Assessments *(continued)*

- **Utilize comparisons with published patterns and indices indicating sub-optimal test performance** (e.g., Wechsler Memory Scale - Revised General Memory vs. Attention/ Concentration index (Mittenberg, 1993); see Trueblood & Schmidt (1993), Nies and Sweet (1994) for a review).

- **Employ shorter symptom validity tests** in order to minimize possibility of negative reactions owing to the nature of protracted (i.e., ad nauseum) participation in easy, boring tasks.

- **Employ more credible and less well known symptom validity measures.** Note: Hiscock - looks easy and obvious and patients often comment (e.g., "Boy, this is easy...just remember the first number from the list".); Rey 15 Item test is also somewhat apparent, and is even discussed in law journals.

Recommendations for Enhancing Validity of Assessments *(cont.)*

- **Vary measures that are employed, in order to prevent discrimination of real tests from symptom validity measures.** Notably, publication of these tests has led to increased recognition by examinees, attorneys, clients, support groups, internet groups, and son on.

- **Apply multiple strategies for assessing motivation, especially when cutoff score approaches are employed, and include qualitative and qualitative measures.** Integration of contextual infomation, history, behavioral observations, interview and collaborative data, personality and coping data wih meassures of effort or performance and current tests data, provides the best information for estimating the degree of effort exerted, and the degree to which testresults are reliable and valid.

Enhancing Validity in Assessment *(continued)*

- **Rely primarily on MD's and PhD's for both interviewing and testing, with only limited employment, greatly decreased reliance on technicians.** Notably, experienced MD's, PhD's who test and interview are infinitely more capable of:

  - (a) Integrating interview and personality and emotional assessment data and inferences, with more sophisticated clinical observations during testing;

  - (b) Adapting more creative modifications of testing procedures given suspicion of low motivation (e.g., chunking, recognition adaptations for recall of information), as well as modifications to the testing process (e.g., provision of corrective feedback; instruction) to increase motivation and optimize effort;

  - (c) Benefiting from probability that examinees will be less likely to believe they can fake out the 'doctor' ;

  - (d) avoiding possible symptom exaggeration owing to fear that problems will be missed by a non-doctoral testing technician.

Recommendations for Enhancing Validity in Assessment *(continued)*

- **Increase administration of tests by clinicians who actually see, for treatment, the types of patients they assess.** This helps assure more adequate clinical skills for detecting sub-optimal performance, as well as collection of internalized tracking data to allow validation of previous inferences across time, and continuous self-correction and increased internalized norms regarding ecological and predictive validity of psych/neuropsych measures)

- **Ensure that important general variables affecting motivation are adequately assessed during an interview that is concluded prior to assessment.** Specifically, assess the impact of anger or blame and feelings of resentment or victimization (e.g., Rutherford, 1989), as well as the other variables shown in the literature to be associated with poor recovery and adaptation to impairments (e.g., Martelli, et al, in press).

Enhancing Validity in Assessment *(continued)*

- **Always assess, in addition to emotional and motivational issues, interest/ disinterest in the testing process, and any obstacles or impediments to optimal effort and performance.**

- **Prepare examinees before beginning testing.** Employ understanding, as well as education, to prepare examinees to perform to their best ability. Emphasize how tests are used with interview, and if less than best effort is made, credibility on interview is lot. Emphasize interview data and corroborative data and functional abilities as important as testing.

- **Establish rapport and attempt to establish a working relationship.** Even in cases of adversarial motivation, valid data collection requires a collaborative effort. Importantly, some social psychology literature suggests that dissimulation might be less likely given better rapport. Be on guard by addressing potential sources of bias directly, and providing feedback and education and clarification.

Enhancing Validity in Assessment
(*continued*)

- **Do not freely share relevant trade secrets (e.g., information about symptom validity tests, or known patterns of performance) with referral sources, attorney's, non clinicians.** These adhere to a completely different set of professional ethics. Notably, several recent law publications recommend preparing clients for testing by counseling them with this information.

- **Remain aware that, in science and medicine, things are rarely either-or, clear cut, or unidimensional. Attorneys, decision making agencies often promote either/or, black/white conceptualizations, and prefer to hire and pay professionals inclined to such conceptualizations.** They seek out less sophisticated, artificially dichotomous models for conceptualizing about the multi-factorial nature of contributors to test results, or brain injury occurrence and its effects, or motivation and malingering.

Recommendations for Enhancing Validity in Assessment *(continued)*

- **Avoid simplistic conceptual models and dichotomous approaches to assessing motivation/effort and malingering. Such approaches usually rely on a cutting score for one or two measures.** Note that cutting scores, by their nature (Dwyer, 1996) always entail judgment; inherently result in misclassification; impose an artificial dichotomy on an essentially continuous variables; and "true" cut scores do not exit.

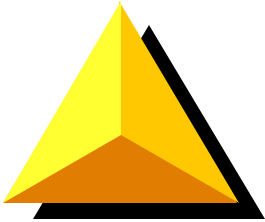# Recommendations for Enhancing Validity in Assessment *(continued)*

- **Employ more sophisticated, more continuous conceptualizations of motivation and response bias using multiple independent measures and estimated effort.** Employ a reasonably sophisticated model that conceptualizes motivation and effort as continuous variables that can vary across tests, settings, and occasions. Utilize and devise models that measure degree of apparent motivation and effort, using multiple data sources, and estimate confidence levels in inferences given consideration of the multiple factors that contribute to test results. Employ similarly sophisticated models for assessing persistent impairments, adaptation to impairments, disability and so on. Probabily statements based on multiple measures are probably best.

Recommendations for Enhancing Validity in Assessment *(continued)*

- **Spend time with patients and try to get to know them from a motivational, emotional status, and personality and coping style perspective.** If motivation seems poor, confront, vs. proceed with GIGO - this is not "gotcha". We can't assume that everyone takes our tests seriously, should be as honest or effortful on our tests as we would like, or that we won't have to work at getting them interested or motivated.

Add

-

- Fed Jud Ctr

-

- Recall is often weak, and calling it inconsistency is a setup
- Long hx of working with dx gives you real feel for real vs. non
- Note: contralateral side of injury usually weakens as well, as found through neuro exams over long history....

THE END

That's all
Folks!!