

ASSESSMENT OF FAMILY SYSTEM OUTCOMES AFTER BRAIN INJURY

Best Practices Day 2004

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Objectives

- Review literature on family system outcomes after ABI
- Discuss limitations in the research
- Present findings from current study
- Discuss implications for practice and future research

Current Research

- Survivor outcome is linked to family outcome (Kay & Cavallo, 1994; Taylor et al., 1995)
- Family needs change over time and exist well beyond acute care (Kolakowsky-Hayner et al., 2001)
- Long-term negative effects on family functioning (Anderson et al., 2002; Gan & Schuller, 2002)

Impact of ABI on Caregivers

- Family strain, psychological distress in 47% of relatives (Kreutzer et al., 1994)
- Negative life change in 67% of spousal or parent caregivers (Wallace et al., 1998)
- Symptoms of depression (73%) & anxiety (55%) in spouses (Linn et al., 1994)
- 47% of caregivers had altered or given up jobs @ 1 year post injury (Hall et al., 1994)

Family Burden

	1 year	5 years
Low	43%	10%
Medium	33%	33%
High	24%	56%



Brooks et al., 1986

Family Burden (cont'd)

- Family burden remained significant @ 7 years post-injury (Brooks et al., 1987)
- Physical changes cause the least burden
- Emotional, behavioral, and personality changes in survivor cause the most burden, NOT injury severity

Research Limitations

- Focused primarily on caregivers
- Exclusion of child/adolescent reports, especially children of survivors
- Problems of conceptualization
- Use of assessment tools with uncertain reliability & validity
- Limited research on the family as a “system”

Goals of the Study

- Examine family system functioning after ABI
- Identify areas of family functioning that are most compromised
- Identify factors associated with the outcome of family system functioning after ABI

Method

- Retrospective design
- Chart review
- Clients from Family Support Service
- Intake questionnaires

Family System Functioning

- Family Assessment Measure (FAM-III: Skinner, Steinhauer, & Santa-Barbara, 1983)
 - Task Accomplishment
 - Role Performance
 - Communication
 - Affective Expression
 - Involvement
 - Control
 - Values & Norms

Variables

- Physical, emotional & cognitive impairments – Problem Checklist (PCL: Kay, Cavallo, & Ezrachi, 1995)
- Caregiver strain – Problem Checklist (PCL – SO: Kay, Cavallo, & Ezrachi, 1995)
- Awareness of deficits – Patient Competency Rating Scale (PCRS: Prigatano & Fordyce, 1986)

Variables (cont'd)

- Neuropsychological variables
 - verbal reasoning & concept formation - WAIS - Similarities
 - visuospatial & visuoconstructional ability - WAIS - Block Design
 - verbal learning - California Verbal Learning Test (CVLT)
 - nonverbal reasoning ability - Category Test (CAT)

Client Sample (n = 66)

- 74% male, 26% female
- Age at injury - 26 years (0.04 - 54.98 years)
- Time since injury - 5.65 years (0.18 - 29.48 years)
- Severity of injury
 - Mild 12%
 - Moderate 15%
 - Severe 73%

Family Role of Client

- Parent 32%
- Spouse 2%
- Son/daughter 62%
- Sibling 5%

Cause of Injury

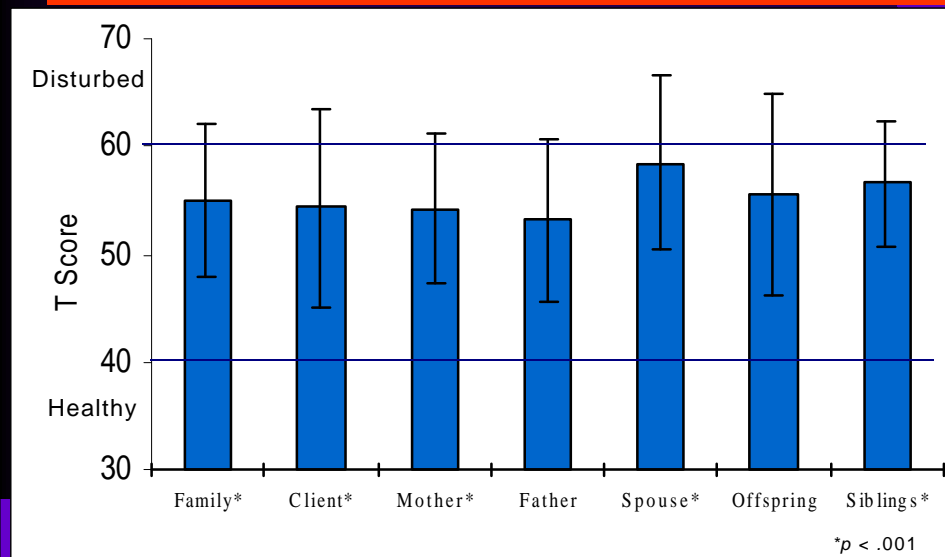
▪ MVC	36%
▪ Assault	9%
▪ Fall	9%
▪ Disease/Illness	38%
▪ Other	8%



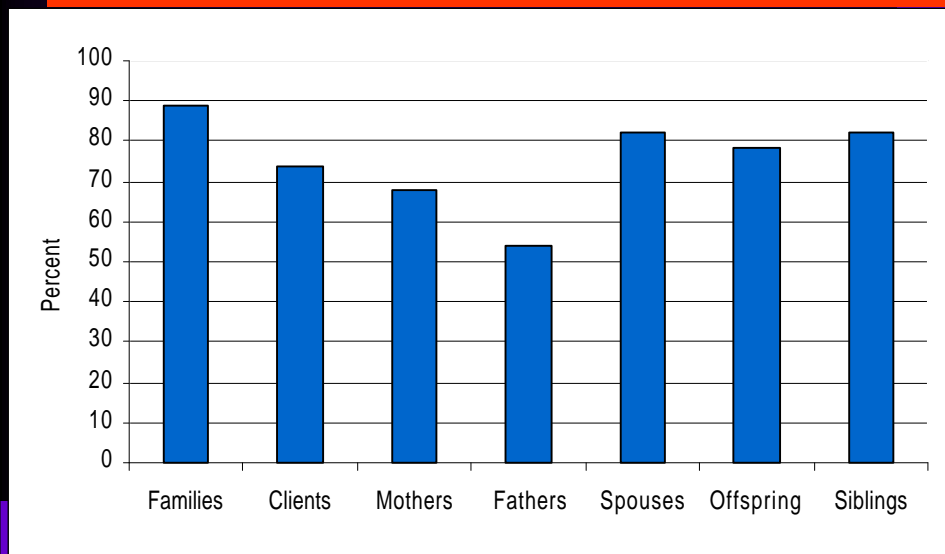
Family Sample (n = 148)

▪ Mothers	26%
▪ Fathers	19%
▪ Spouses	13%
▪ Siblings	24%
▪ Offspring	18%

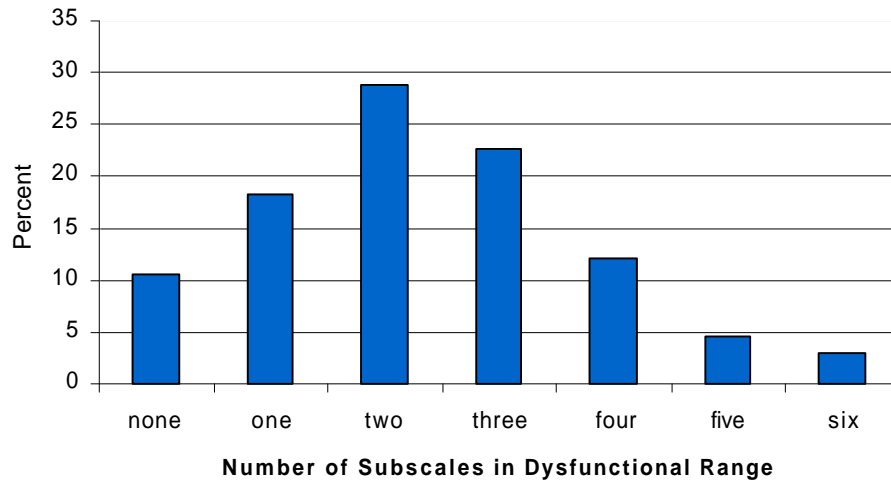
Family System Functioning Compared to the Norm



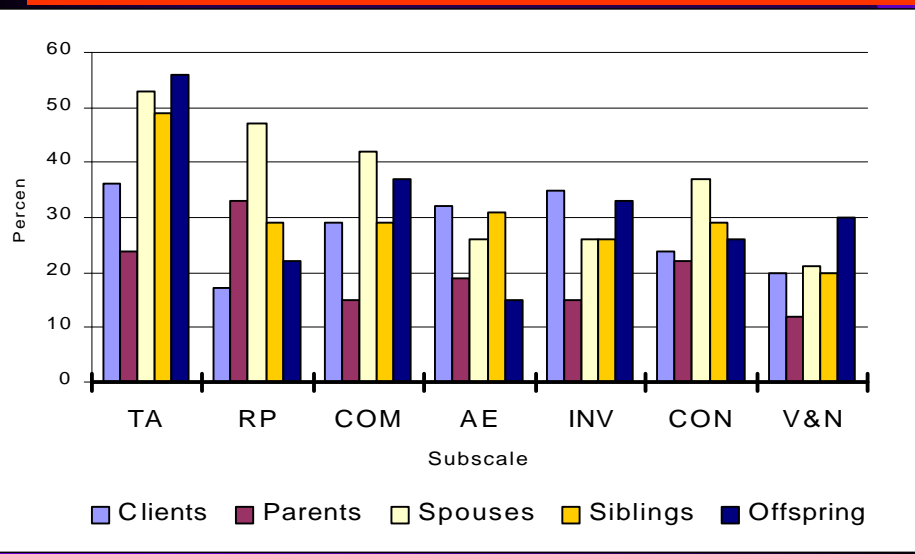
At Least One Subscale in Dysfunctional Range



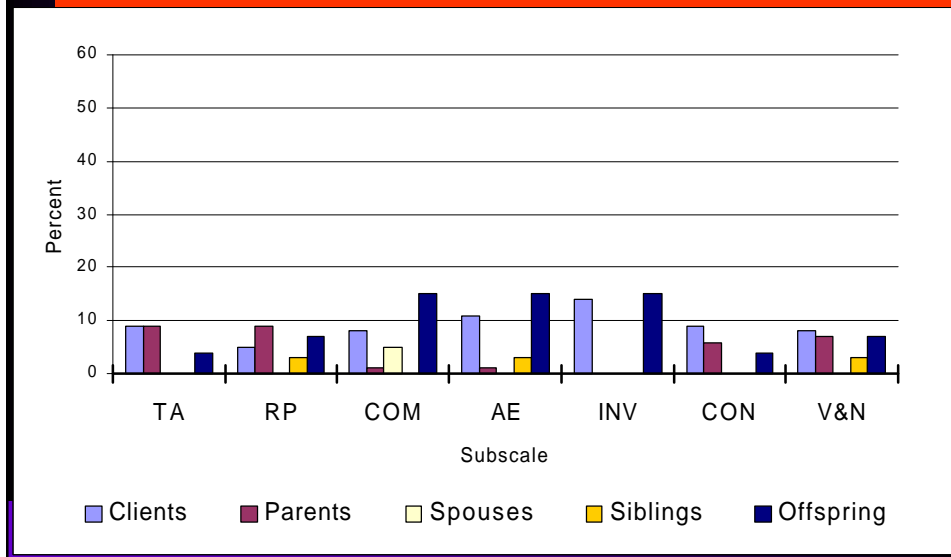
Family System Functioning



Subscale Responses in the Dysfunctional Range (T>60)



Subscale Responses in the Strengths Range (T<40)



Results

- Ratings of family functioning more dysfunctional than the norm ($p \leq .0005$)
- All clinical subscales in family system and caregiver were significantly elevated compared to the norm ($p < .002$)
- Few strengths in family functioning

Results (cont'd)

- Family functioning was not predicted by neuropsychological or ABI impairment related variables
- Strongest predictors of family functioning were caregiver strain ($p = .039$) and client gender ($p = .023$)

Conclusions

- ABI associated with poorer family system functioning
- Individuals with ABI, mothers, spouses, and siblings report significant distress in family functioning
- Higher caregiver strain & client gender (i.e., female) are predictive of poorer family system functioning

Implications for Practice

- Support for the caregiver
- Intervention for the entire family system
- Screening of families where a female is the injured individual
- Long term supports

Future Directions

- Compare families in treatment to a sample not receiving treatment
- Longitudinal follow-up of families over time
- Identify factors associated with resiliency in family functioning





Thank You!

Selected References

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