

**Critical Review:**  
**Is Group Therapy Effective in Remediating Social Communication Skills Following a Traumatic Brain Injury (TBI) in Adolescents and Adults?**

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This critical review examines the evidence regarding the effectiveness of group social communication skills training in adolescents and adults following a traumatic brain injury (TBI). Two

examine the existing research literature in order to determine whether group social skills training can aid in re-establishing and maintaining social skills (Dalhberg et al., 2006).

### *Objectives*

The primary objective of this paper is to critically evaluate existing literature regarding the effectiveness of group social skills training following a TBI in adolescents and adults. The second objective is to provide recommendations for clinical practice and future research.

### *Methods*

#### **Search Strategy**

Articles related to the topic of interest were found using the following computerized databases: Medline, PubMed and PSYCHinfo. Keywords for databases were as follows:

[(acquired brain injury) or (TBI) and (group social skills training)]

[(acquired brain injury) or (TBI) and (pragmatic deficits)]

[(acquired brain injury) or (TBI) and (intervention)]

The search was limited to articles written in English.

#### **Selection Criteria**

Primary studies selected for inclusion in the critical review were required to investigate the effectiveness of training social communication skills in a group setting for adolescents and adults. Secondary studies discussing the effect of social communication skills deficits on reintegration into society and life satisfaction were also selected for the purpose of providing further background information.

#### **Data Collection**

Results of the literature search yielded seven articles congruent with the aforementioned selection criteria. For the primary selection criteria, two

researchers (all women), who were blinded to the participants treatment condition, were required to engage in conversation with the participants. For the primary analysis, data was analyzed through *treatment versus no-treatment comparisons* using both a per-protocol and an intent-to-treat (ITT) model. For second set of analyses, data was analyzed through *change over time comparisons* using repeated-measures general linear model (GLM). Overall, results strongly supported the authors first and third hypotheses, and partially supported their second hypothesis (Dahlberg, 2007).

This randomized controlled trial was well designed as it included research assistants blinded to both the treatment and control groups, and it used measurement tools sensitive enough to detect improvement. In addition, the researchers used published treatment materials, allowing for the study to be replicated by other researchers. It can also be speculated that the a deferred treatment group may have had an effect on the low dropout rate. Although this study did not deviate from the standard protocol and resulted in no adverse events as a result of treatment, some limitations of the study can be noted. To begin, due to the stringent exclusion criteria, results may not generalize to the entire population of individuals with TBIs. In addition, the subjects were assigned without blinding and most of the outcome measures did not allow for blinding as they were completed by subjects or their significant others.

The results accrued from this study can be interpreted with great confidence, due to the strong design of the study and the strict protocol followed by Dalhberg et al., (2007). In addition to directly examining the research question in this review, Dahlberg et al., (2007) also examined subjects with TBIs and their significant

community participation, and satisfaction with life. Overall, this level 1 evidence, along with the compelling validity of this study, provide promising implications for future research..

### **Study #2:**

McDonald et al., (2008) conducted a randomized controlled trial in order to determine social skills deficits including unskilled, inappropriate behavior, problem reading social cues (social perception), and mood disturbances (such as depression and anxiety) could be remediated after severe traumatic

A total of 39 participants between the ages of approximately 25 and 47, who were recruited from brain injury units in Sydney, Australia, participated in this study.

Participants were assigned randomly to one of three groups: a skills training group, a social activity group, and a waitlist group that would received deferred treatment. The social activity group was included to determine whether or not social activity alone could improve performance.

The members of the skills training group participated in a 12-week social skills training program, in which they met for 3 hours each week. Groups consisted of three to five members and two therapists. In addition, members of this group were also required to attend a one hour individual therapy session weekly with a psychologist to address personally identified issues such as anxiety, self-esteem, and depression, in order to help reinforce skills learned in the group sessions. Each week in group therapy, a specific aspect of social behavior (e.g. introducing oneself and others, listening, starting a conversation, etc.) were addressed and individual goals were identified for each client based on their difficulties. In addition, one hour each week was devoted to fd behaviorTJETi62(b)-5(eh)413(s)3(p)-5(ec)-3(t)-4 rev bl

appeared to be specific to partner directed behavior.  
Therefore, the authors concluded that treatment effects

used, (RICE-RSPCS) to assess pragmatic skills through observation.

Despite the level 2c evidence from this study, the non-randomized design of this study along with the methodological weaknesses stated above, weaken the compelling results accrued from Wiseman-Hakes (1998). Therefore, the results of this study and their clinical implication can only be considered suggestive.

### *Discussion*

Overall, the majority of research suggests that social functioning deficits in individuals with TBI can be ameliorated to some degree through a group training intervention. In addition, results from Dahlberg et al., (2007) and Wiseman-Hakes et al., (1998) suggested that maintenance and generalization occurred as improvements were evident at follow-up. Perhaps most importantly, Dahlberg et al., (2007) discovered that training social communication skills ultimately improves overall life satisfaction.

Although the research is promising, there are a number of significant limitations in this area of research. To begin, all of the studies examined varied in their design including specific characteristics of the participants (e.g., age and severity of deficits), lesion characteristics (e.g. age of onset and injury severity), and the outcome measures used to assess progress varied considerably. Other factors to consider include presentation of data,

2011). In addition, the studies were based on relatively small sample sizes and outcome measures may not have been completely adapted to the TBI population.

Although the previously mentioned limitations weaken the validity of the results, there were many encouraging factors that should be considered for initiating further research. One of the most compelling pieces of evidence was observed in the study conducted by Wiseman-Hakes et al., (1998), as they observed significant improvements in social communication skills in individuals who were eight and nine years post-injury. This suggests that gains made were as a result of treatment as opposed to spontaneous recovery, and also instills hope for gains to be made with individuals in the chronic stage of TBI. Similarly, results from McDonald et al., (2008) revealed that even individuals with severe and chronic brain injuries can make improvements.

### *Conclusion*

At present, a concrete statement about the effectiveness of group training to improve social communication skills cannot be made, as there has been limited research

in this area. However, considerable progress in regards to understanding social communication deficits, the consequences it has on social functioning, along with appropriate methods of treatment have been made. Presently however, empirical evidence is not strong enough to support the use of group intervention on a large scale until further research is conducted.

### *Clinical Implications*

- Dahlberg, C., Hawley, L., Morey, C., Newman, J., Cusick, C.P., & Harrison-Felix, C. (2006). Social communication skills in persons with post-acute traumatic brain injury: Three perspectives. *Brain Injury, 20*(4), 425-435.
- Driscoll, D.M., Dal Monte, O., & Grafman, J. (2011). A need for improved training interventions for the remediation of impairments in social functioning following brain injury. *Journal of Neurotrauma, 28*, 319-326.
- Knox, L., & Douglas, J. (2009). Long-term ability to interpret facial expression after traumatic brain injury and its relation to social integration. *Brain and Cognition, 69*, 442-449.
- McDonald, S., Tate, R., Togher, L., Bornhofen, C., Long, E., Gerlter, P., & Bower, R. (2008). Social skills treatment for people with severe, chronic acquired brain injuries: A multicenter trial. *Archives of Physical Medicine and Rehabilitation, 89*, 1648-1659.
- Ylvisaker, M., Turkstra, L.S., & Coelho, C. (2005). Behavioral and social intervention for individuals with traumatic brain injury: A summary of the research with clinical implications. *Seminars in Speech and Language, 26*(4), 256-267.
- Wiseman-Hakes, C., Stewart, M.L., Wassarman, R., & Schuller, R. (1998). Peer group training of pragmatic skills in adolescents with acquired brain injury. *Journal of Head Trauma Rehabilitation, 13*(6), 23-38.