Effectiveness of BSFT in Treating Juvenile Delinquents and Their Parents at Shikusa Borstal Institution: A Case of Shikusa Borstal Institution in Kakamega County

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ABSTRACT
Adolescent delinquency is a major health concern. BSFT is one of the many family therapies targeting the youth and their families as a system throughout the treatment. The objective of this study was to determine the effectiveness of Brief Strategic Family Therapy (BSFT) in treating juvenile delinquents. The study was conducted at Shikusa Borstal institution, Kakamega County which was purposively chosen as one of the three Borstal institutions in the country. The study used a quasi-experimental study design with pre and post- test evaluations using both quantitative and qualitative data collection instruments. Purposive sampling was used to pick the 67 participants who were screened and scored positively both on CD and ADHD. Data was collected using socio-demographic and standardized tools. The standardized tools included Family Assessment Measure and Youth Self Report (YSR) for Ages 11-18. The Family Assessment Measure (FAM111) questionnaire was used at pre-test evaluation only while YSR was used at both pre- and post-test evaluations. Data was analyzed using SPSS version 21. The results showed proportionate morbidity rate of 61.2% of the 67 sampled delinquents having CD and 59.7% having ADHD while 22.4% had a comorbid of CD and ADHD. A t-test was used to determine the statistical significance in the paired mean difference scores between baseline and midline as well as endline. Results showed statistical significance for both CD and at ADHD (p<0.0001). Cohen’s d effect sizes for the ADHD and CD were calculated and showed statistically significant effect size for both ADHD and CD. Results indicated that BSFT was effective in reducing the symptoms of both CD and ADHD among the juvenile delinquents, consequently treating delinquency with a statistical significant significance of P<0.0001.

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Introduction
Adolescent delinquency is a major health concern. The treatment and management of adolescent delinquent requires concerted effort involving families. BSFT is one of the many family therapies among others such as systematic, structural, experiential, narrative, cognitive-behavioural, multi systemic, psychodynamic and solution focused family therapy that has been found to be effective in treating adolescent delinquents (Szapocznik, Schwartz, Muir and Hendricks 2012). According to Robbins, Szapocznik and Horigian (2009) BSFT builds on the assumption that families can be viewed as systems and each individual in the family is important for the family system as a whole. In a study of a systematic review of family therapies, Lindstrom, Rasmussen, Kowaliski, Filges and Jorgensen (2013) found BSFT to be effective in the treatment of young people with behavioural problems. This is supported by Robbins, Szapocznik and Horigian (2009) who stated that BSFT is a manualized treatment designed to address aspects of family functioning associated with behaviour problems. In the same study the authors found that BSFT was effective compared to other treatments in engaging adolescents and family members in treatment, decreasing adolescent’s externalizing behaviours, decreasing risky behaviours, increasing adolescent’s prosocial activities and improving family functioning. In a similar way Santisteban, Suarez and Robbins (2015) indicated that BSFT is a structured problem focused, directive and a practical approach that follow a prescribed format. The authors also noted that BSFT is flexible in that it is adapted to the content of each family’s central concern.

In reviewing the effectiveness of BSFT, Szapocznik and Williams (2000) observed that BSFT is a short term family treatment model developed for youth with behaviour problem that relies on both structural and strategic family theories. Its goal is to change the family patterns of interaction that allow or encourage problematic adolescent behaviour (Santisteban, Suarez, Robbins and Spzapocznik, 2015). In a similar way, Horigian, Robbins and Szapocznik (2004) stated that BSFT is a family oriented prevention and treatment intervention for young people. It aims at creating changes in interactions relevant to the identified problems within families and in individual family members (Robbins et al., 2011).

The effectiveness of BSFT is seen in preventing the youth from becoming involved in crime, keeping them off trouble through close supervision by the parents, thus reducing
recidivism (Veronneau & Dishion, 2010).

This is done by improving family relationships within the juvenile’s family system as a means of impacting positive behaviour change (Radohl, 2011). According to Bourdin et al. (1995) BSFT uses the techniques of forming a therapeutic alliance with the family members, and family as a whole, identifying interactional patterns that allow or encourage problem behaviours and developing and implementing strategies for change aimed at increasing family competence. This treatment approach agrees with Latimer, Winters and D’Zurilla (2003) who stated that the family unit is a key factor in the pro-social development of adolescents. Thus the family functioning may provide an early and sustained impact on family bonding, conduct disorder, choice of peers and subsequent delinquency. The family is of critical importance since it functions as the principal social unit in formative years of early childhood (Robbin, Szapocznik & Horigian, 2009). Similarly, Synder and Patterson (1997) stated that the family serves as the source of emotional support, learning opportunities, and moral guidance for providing self-esteem and physical necessities.

In Kenya juvenile delinquency is on the increase, and the number of children in conflict with the law has risen significantly since 2006 (Department of Children Services, 2010). For instance, the number of juveniles in conflict with the law has been on the increase with a number of children ending up in the Borstal institutions (Human Right Watch Report, 2016). This is confirmed by Probation Report, 2016 which indicates that the total number of juveniles in the two Borstal institutions of Shikutsa and Shimo La Tewa was 2,395 in 2011, 2,425 in 2012, 2,401 in 2013, 2,577 in 2014 and 2,582 in 2015 (see Appendix I). On the other hand the government spends huge amounts of money in taking care of juveniles in correctional facilities yet the effectiveness of these programs is minimal due to lack of adequate staff with skills in handling juvenile delinquency (Onyango, 2009).

Adolescent delinquency in Kenya seems to have connection with dysfunctional family. In the digital Standard of January 2015, the Principal Secretary in charge of special programmes in the ministry of Interior and National Coordination, Mukobe, Josephata blamed the youth crime and reoffending on poor parenting. This confirms what (Evans, Turner & Trotter, 2012) asserted that poor parenting and lack monitoring and supervision contribute to adolescent risky behaviours. In treating adolescent delinquency, BSFT has successfully been used in treating adolescent delinquents in USA and Asia (Baldwin, 2012).

Delinquency is transient and normative and therefore is a major challenge to psychological experts (Loeber & Stouthamer-Loeber, 1988), According Sibley, Kent, Pelham, Molina, Waschbusch, Yu (2011) 12.1% of violent crimes and 19.1% property crimes in 2007 were committed by juveniles. According to the Sedlack and Pherson (2010) Juvenile crime is serious and may represent a significant number of crimes committed in a society. The authors reported that the growing concern is that in many countries violent crimes are being committed by the youth. The same report indicated that a total of 2.1 million juveniles were involved in criminal offenses and that one (1) in eight (8) violent crimes was attributed to juveniles. Similarly, to Livsey, Sladky, Kang and Puzzanchera (2011) juvenile courts in the US handled 1.1 million cases of serious offenses which represented 12% of all the crimes involving serious offense cases in the country.

Justice (2014) in the 2010 US census 7,418, 500 criminals were persons below the age of Eighteen (18), indicating a significant figure in youth crime. In Uruguay, a report by Munyo indicated that youth crime increased at 180% between 1997 and 2000 and in 2010 the youth population which is at 8% accounted for 15% of the total offense committed.

In Africa, Igbibona (1998) observed that delinquency and related crime is not only on the increase but is also widespread. The author however, noted that even though there is widespread prevalence of juvenile delinquency, the problem has not been intensively studied except with a few articles addressing juvenile delinquency in specific countries. Similarly, Fourchard (2010) observed that in both Nigeria and South Africa, youth crime is perceived by both officials and academics as a major social and political contemporary hence the need for serious attention to juvenile crime. According to Okordudu (2012) in her study of influence of parenting styles on adolescent delinquency, the researcher noted that in Nigeria, involvement of adolescents in delinquent activities is equally on the increase. In the same study, the researcher observed that juvenile delinquency rose from 367 to 538 per 100,000 persons between 1986 to 1996, and that the figure has been rising steadily. According to Maganga (2005), juvenile delinquency in Tanzania is not only rampant but is also escalating day by day. The researcher further noted that social-economic factors such as lack of parental supervision and accessability as well as poverty are related to involvement with deviant peers.

In Kenya, the juvenile crime has been on the increase as observed by Kikuvi; 2011; Onyango, Ondiek, Odhiambo and Ayugi, 2013; Wategi, 2008; Wandonyi, 2007 who indicated in their studies that adolescence delinquency and the number of children in conflict with the law have been on the increase. A report by the Children’s department services in 2010 indicated that adolescent delinquency has been on the increase since 2006. Similarly the number of children in conflict with the law has been on the increase. (Human Rights Watch Report, 2016). The same report indicates that there were 4,057 juvenile arrests in 2004, 3,841 in 2005, 2552 in 2006, 2,222 in 2007, 3,087 in 2008, 4,025 in 2009 and peaking to 5,529 in 2010.

Adolescents deserve and require special handling because they are in their formative years (Doherty & McDaniel, 2010). Depending on how they are handled at family level, they may or may not engage in criminal behavior (H.Goldenberg; I.Goldenberg, 2008). Additionally, Formoso, Gonzales, and Aiken (2000) observed that the family can act in ways that may promote or encourage negative behaviours in adolescents such as skipping classes, bullying, drug use and promiscuity. The family, therefore, functions as the principal social unit during the formative years as well as being the source of physical needs, emotional support and moral guidance (Fixen, Blasé, Duda, Naom & Dyke, 2010). According to Santisteban, Suarez, Robbins & Spocznik (2015) when the family fails to provide both material and emotional support, the children typically suffer. They further observed that family dysfunctions such as family history of violence, poor socialization, disorganization, isolation, disruption and drug use may influence delinquency.

The fact that these rehabilitation programs seem not to be effective and there seems to be little research on intervention programs in the rehabilitation centers targeting the juvenile delinquents and their parents is the research problem that this study seeks to tackle. It is likely that the rehabilitation programs may not be effective for juvenile delinquents.
This study therefore sought to establish the effectiveness of BSFT in treating juvenile delinquency in Borstal Shikutsa.

**Methods**

A quasi experimental design study design was employed. Descriptive statistics explained socio-demographic characteristics of the juveniles. Juvenile delinquency, family dysfunction, the psychological disorders of CD and ADHD and the effectiveness of BSFT were described using means and standard deviations for continuous data and frequency and proportions for categorical data. The research objective and question were addressed using univariate and bivariate statistical procedures.

The participants were recruited from Shikutsa Borstal institution. Purposively sampling was used to select Shukusa Borstal institution and also to recruit the study participants who were in their first and second years at the institution. Those in the sample were the 66 who screened positive to CD and ADHD. BSFT was administered to the said juveniles and their parents with the aim of reducing the symptoms of CD and ADHD, hence treating delinquency and improving family functioning. The juveniles and their parents had weekly therapy sessions for 12 weeks.

Human subjects approval for this study was obtained from Nairobi Hospital Bioethics and Committee as well as from National Commission for Science and Technology (NACOSTI), Kenya. Informed assent and consent were obtained from the participants with signed copies returned to the researcher. Data was collected using Youth Self Report (YSR), Family Assessment Measure (FAM111) and Brief Strategic Family Therapy (BSFT).

**Youth Self Report for ages 12-18 (YSR)**

The instrument was administered at the baseline survey as a pre-test and post test at midline and endline. It has 112 questions on a 3-point Likert Scale for example; 0=Not true, 1=Somewhat/Sometimes true, 2=Very True or Often True scale. The scores on CD range from 0-26 and was covered by questions; 16,21,26,28,37,38,43,57,73,82,90 and 100 from the instrument. Any a score above 12 indicated the presence of conduct disorder. The scores for ADHD ranged between 0-26 and was covered by questions; 4,8,10,15,22,24,41,53,67,78,93,100 and 104. Any score of 13 and above indicate the presence of ADHD. The scoring instrument was normalized in Ethiopia, Malawi and Kenya and in Kenya. The instrument has been used in Kibera with high validity and reliability. This resulted in the adaptability of the instrument (Harder, et al., 2014).

**Youth Self Report (YSR)** has the capability to offer psychosocial adjustment in the presence of externalizing and internalizing problems Ebustani, Bernstein, Martinez, Chorpita and Wesiz (2012). It has well-validated psychometric properties with the ability to provide normative reference information during a study, and has the capacity to involve adolescents with chronic or healthy conditions. Harder et al. (2014) noted that YSR has been widely used in assessment method of the youth. It has reliability at 0.86. It bases on internal consistency has been recommended for clinical settings. Having been adopted and used in a Kenyan setting makes it more appropriate for assessing the juveniles in Borstal institution. Harder et al. (2014) observed that YSR offers a higher internalizing capacity at 0.91, which exposes multicultural findings within the behavioral and emotional domain. Furthermore, a recent report to assess Kenyan youth potential and self-development (Kenya National Human Development Report, 2009) shows YSR as an effective and valid tool that is able to predict binary classification, with easy interpretation of values.

**Family Assessment Measure (FAM111)**

FAM 111 is a self report instrument that provides qualitative indices of family strength and weakness. The tool was developed for measuring family functioning (Adam, Overhauser & Lehnert, 1994). The authors further indicated that the instrument measures such concepts as task accomplishment, role performance, communication, affective expression, control values and norms. According to Skinner & Stenhauer (1983) the instrument has three forms that include dyadic relationship that examines relationship between specific individuals in the family, General scale that focuses on family system and self rating scale that taps individuals perceptions of his/her functioning in the family. However, this instrument adopted to the assessment needs of each family functioning.

This study adopted the General Scale facet which was found to be relevant in assessing family. Scores were as follows in terms of dysfunctional family status; Normal range 0-36; Mild 37-60; Moderate 61-108. Any scores above 108 indicated severe dysfunctional family status. The General scale had 50 questions and was scored 0- Likert Scale as strongly=0; Agree=1; No answer=2; Disagree=3 and Strongly disagree=4 (See Appendix G).

The tool takes between 30-40 minutes to administer. However the tool takes a shorter period if only one scaled is administered (Skinner & Stenhauer, 1995). The also observed that the assessor can use one or more scales depending on the need of the family. For this study the General scale facet was adopted and scoring customized. The general scale was picked because it provides the overall rating of family functioning. The scale mainly focuses on communication, affective expression, social desirability and defensiveness.

FAM111 is useful when working with non-verbal members such as resistant adolescents as it is less threatening. The questionnaire was translated into Kiswahili for ease of understanding for both juveniles and the parents. The instrument has reliability. The tool has been researched and alpha values found to be between .60 to.80 with alpha for adults .93 and children .94 (Skinner & Stenhauer, 1983).

**Family Assessment Measure (FAM) 111 has been researched on and found to effectively and efficiently assess family functioning. It is able to differentiate family types with statistical significance of (p< .0) (Skinner & Stenhauer, 1983)**

**Brief Strategic Family Therapy (BSFT) intervention**

A total number of 67 respondents participated in the study. The participants were randomly assigned into three groups with each group having 22 juveniles and their parents. The researcher’s group had 23 participants. Each group was also assigned one support staff from the institution. Each family received 12 sessions of therapy within a period of 3 months. The table below gives a representation of how the therapy sessions were administered.

BSFT is typically conducted in an average of 8-12 weeks depending on the severity of the problem. The first session was based on clinical interview of the families, with the therapists making effort to conceptualize cases and helping clients understand BSFT requirements. The next two sessions involved developing a therapeutic alliance with each family member and with the family as a whole. The therapist demonstrated respect for each individual member and the family as a whole.
After this there were two sessions devoted to diagnosing the nature of the family strengths and problematic relationships, with emphasis on those family relationships that are supportive or have negative impact on the juveniles’ behavior. Consideration was also made to parental figures’ ability to correct inappropriate responses.

The next three sessions were devoted to developing and implementing treatment strategies aimed at capitalizing on the family strengths and correcting problematic family relations in order to increase family competence. The next three sessions were for strategies implementation. This was done by reinforcing family behaviors that sustain family competence, shifting the nature of alliances and interpersonal boundaries, building conflict resolution skills and providing parents with guidance and coaching. The last two sessions were for observing changes in juveniles and new ways of interaction among the family members as well as termination.

**Effectiveness of BSFT in treating the juveniles**

The study aimed at determining the effectiveness of BSFT in treating juvenile delinquents and their parents at Shikusa Borstal institution in Kakamega County. The data analyzed in this section is to show the effectiveness of BSFT from baseline survey to endline.

The first midline evaluation was done three months after treatment and endline was done six months after the treatment. The mean scores of the treatment at baseline and endline were then compared. Cohen d formula was used to determine the effectiveness of BSFT. The mean score before intervention minus the mean score after intervention was divided by the Standard Deviation of treatment (Morris & Deshon). This was calculated at 95% confidence interval.

**Table 4.15. Mean scores at pre-treatment and post-treatment at 3 months and 6 months for ADHD and CD.**

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Mean scores (SD) two/6 months</th>
<th>one/3Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Treatment/baseline (n=67)</td>
<td>Treatment One (n=66)</td>
</tr>
<tr>
<td>ADHD</td>
<td>12.41 (4.674)</td>
<td>10.21 (3.736)</td>
</tr>
<tr>
<td>CD</td>
<td>12.39 (4.526)</td>
<td>9.67 (4.093)</td>
</tr>
</tbody>
</table>

The mean scores for ADHD and CD at baseline and at midline after 3 months and endline after 6 months are shown in table 4.15. The study finding revealed a steady decline in the mean scores for ADHD and CD at the repeated measures. ADHD mean scores declined from 12.41 (SD +4.674) at baseline to 8.98 (SD +3.289) midline.
The CD mean scores declined from a baseline of 12.39 (SD ±4.526) to midline of 9.23 (SD ±3.463). This finding demonstrated that the BSFT was effective in treating ADHD and CD among the incarcerated youth in Shikutsa Borstal Institution, Kakamega County. However, the study design had no counterfactual for comparison purposes to help ascertain causality.

Sample paired T-test was used to determine the statistical significance in the paired mean difference scores between baseline and midline as well as endpoint. With regard to ADHD, the study revealed mean difference scores between baseline and treatment one of 2.197 (SD ± 4.608) and this was statistically significant (p<0.0001). At midline the mean difference scores 3.424 (SD±5.189) and this was statistically significant (p <0.0001). With respect to CD, the study also showed statistically significant difference in mean difference scores at both post-treatment one and post-treatment two 2.727 (SD± 3.463) (p<0.0001) (table 4.15). This means that BSFT was effective in treating adolescent delinquency among the incarcerated youth in Shikutsa Borstal Institution, Kakamega County (table 4.15).

**Table 4.16. Mean outcome difference scores from pretreatment to post-treatment at 3 month and 6 month follow-up for ADHD and CD.**

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Mean difference scores (SD)</th>
<th>Effect size</th>
<th>95% CI</th>
<th>Effect size</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADHD</td>
<td>Pre-treatment (n=67)</td>
<td>2.197 (4.068)</td>
<td>P&lt;0.000</td>
<td>3.424 (5.189)</td>
<td>P&lt;0.000</td>
</tr>
<tr>
<td>CD</td>
<td>Pre-treatment (n=66)</td>
<td>2.727 (5.313)</td>
<td>P&lt;0.000</td>
<td>3.167 (5.143)</td>
<td>P&lt;0.000</td>
</tr>
</tbody>
</table>

**Table 4.17. Effect sizes from pre-treatment to post-treatment at 3 and 6 month follow-up for ADHD and CD.**

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Pre/3-month post-treatment (n=53)</th>
<th>Pre/6-month post-treatment (n=51)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADHD</td>
<td>Effect sizes 95% CI</td>
<td>Effect sizes 95% CI</td>
</tr>
<tr>
<td>CD</td>
<td>0.524 -0.192 – 1.240</td>
<td>0.171 – 1.339</td>
</tr>
<tr>
<td></td>
<td>0.635 -0.095 – 1.366</td>
<td>0.108 – 1.472</td>
</tr>
</tbody>
</table>

Cohen’s d effect sizes for the ADHD and CD are calculated as (mean before intervention – mean after intervention) SD of treatment difference scores (Morris and DeShon, 2002) with corresponding 95% confidence intervals calculated. Effect sizes were computed and showed statistically significant effect size for both ADHD and CD at post-treatment two (table 4.17) and not post-treatment one. This means the effect of BSFT was evident with longer therapy. Cohen’s d effect size value for post-treatment one were d=0.524 and d=0.635 for ADHD and CD respectively. These were not statistically significant though (table 4.17). At post-treatment two Cohen’s d effect size were d=0.855 and d=0.790 for ADHD and CD respectively. These effect sizes were statistically significant at α=0.05. This suggested a very large practical significance for the ADHD and CD at 6 months post-treatment.

**Discussion**

The researcher used FAM 111 (General scale) questionnaire to determine the level of family dysfunction at pr-treatment. The researcher also used the YSR to screen for CD and ADHD among the respondents. The scores for family dysfunction ranged between 0-200 as follows; normal (0-36), mild (37-60), moderate (61-108) and severe (108 and above).

FAM111 questionnaire was used at baseline survey while YSR was use at baseline, midline and endline assessments. The scores for YSR ranged between 0-26 for both disorders and any scores 13 and above indicated the presence of the disorder. All the respondents received 12 sessions of BSFT.

The treatment was administered for 3 months. The reduction in symptoms of CD and ADHD was evaluated after 3 months after treatment at midline and after 6 months at endline. Mean scores for baseline were then compared. The findings revealed that ADHD mean scores declined from 12.41 (SD ±4.674) at baseline to 8.98 (SD ±3.289) at post-treatment two. The finding further revealed CD mean scores declined from a baseline of 12.39 (SD ±4.526) at post-treatment two of 9.23 (SD ±3.463). This demonstrates that the BSFT was effective in treating ADHD and CD symptoms among the incarcerated youth in Shikutsa Borstal Institution, Kakamega County. This study finding supports the findings by Szapocznik, et al. (2012) that found BSFT to be effective in treating juvenile delinquents. The study finding further support finding by Lindstrom, et al. (2013) that BSFT was effective in treating young people with behavioural problems.

BSFT was found to be effective across delinquents irrespective of their age, level of education, nature of crime committed and level of family dysfunction. There were significant changes from baseline to endline for both CD and ADHD. Data showed an effect size of d= 0.524 for ADHD at post-treatment one after 3 months and 0.635 for CD. At treatment two after 6 months, the effect size was practically significant at 0.855 for ADHD and 0.790 for CD. The study further reveals the effect sizes at α=0.05 indicating that BSFT was more statistically significant in its effectiveness with longer therapy. This means that BSFT was effective in treating adolescent delinquency among the incarcerated youth in Shikutsa Borstal Institution, Kakamega County. This study finding supports findings by Linsky (2009); Szapocznik et al. (2013); Kessler et al. (2010) that BSFT improves delinquent behavior problem by creating changes in family functioning that contribute to adolescent delinquency.

**Conclusion**

The study established that BSFT was effective in treating juvenile by reducing the symptoms of CD and ADHD. This was done by establishing the mean scores at pre-treatment and post treatment and also by computing effect sizes. Practical significance was established at endline after 6 months, indicating that BSFT was effective with longer therapy. This study therefore proved that BSFT was effective in treating juvenile delinquents at Shikusa Borstal institution by reducing the symptoms of CD and ADHD.

**Recommendations**

From the study, findings have been generated that would be of great benefit to stake holders charged with the responsibility of rehabilitating the juveniles, their parents as well as educationists and researchers. From the study findings, the following recommendations can be made:

a) **Policy Makers**

1. The study established that there was rehabilitation programs put in place for the rehabilitation of the juveniles. However, the juveniles were not screened for any psychological disorders underlying delinquency. Based on this finding, it is recommended that the prison department which is charged responsibility of rehabilitating juveniles develop adequate policies and procedures for screening the young offenders for any mental health problems.

2. The study established that most of the juveniles came from dysfunctional families.
The study also established that the juveniles normally have one day as parents’ day in a month to meet with the parents while in the Borstal institution. The study finding established the importance of parental involvement in rehabilitation of juvenile of the juveniles. Based on this finding, it is recommended parental involvement through joint therapy with the juveniles be intensified as part of rehabilitation process.

3. Based on the study findings, there is need for aftercare program to provide psychological support for young offenders transiting back to the community after successful completion of rehabilitation programs.

**Areas for further research**

1. There is need for other studies to compare BSFT to other empirically validated family based and non family based interventions to juvenile delinquents in Shikusa Borstal institution.
2. There is need for further studies on effectiveness of BSFT to other clinical settings such as drug addiction rehabilitation centres.

**References**


Morris, S.B., & DeShon, R.P. (2002). Combining effect size estimates in meta-analysis with repeated measures and independent-groups designs. Psychological Methods, 7, (1) 105-125


