

**Yoga and Counselling in the treatment of Major
Depression:
Pilot Study of counselling, and counselling and yoga
combined in a university student population.**

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Abstract:

To determine whether the benefits of the combined treatment of solution focused counselling and yoga is more effective than counselling treatment alone in the management of major depression within the university student population.

A pilot study with a group having counselling on its own and then the same group having a combination of yoga and counselling treatment two months later. It needs to be noted that there is no control/comparison group in this study.

Involved in the study were, students of both genders, aged 18-60 years with major depression, and who had a score of 13 or more on the 17 item Hamilton rating scale for depression and a minimum duration of illness of four weeks. Nine participants were involved in the study and seven participants completed the full study. Students were recruited voluntarily from Charles Darwin University, Casuarina campus in February 2004.

During the first stage the group received three solution focused counselling sessions (individually), provided fortnightly by student counsellor and then in the second stage which commenced two months later, a combination of three solution focused counselling plus six yoga sessions. The counselling was again conducted by the student counsellor, fortnightly and individually. The student counsellor, who is also a fitness professional, conducted the yoga treatment; these sessions were in a group setting given on a weekly basis

Hamilton rating scale for depression (assessed four times, pre-study, post-first stage, pre-second stage and post-study) and CES-D depression self-rating scale assessed at every counselling session and final closure session (Totalling 7 assessments per participant) was used to measure the results.

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Of the nine participants, seven completed the whole study. Two participants scores were seven and below on the Hamilton rating scale for depression, therefore meeting the criteria of being clinically recovered from major depression. Another three participants had score of twelve and below on the Hamilton rating scale for depression, meeting the criteria of being partially recovered from depression. The other two participants who completed the whole study had scores of thirteen or above on the Hamilton rating scale and were deemed not to have recovered from clinical depression. All participants completing all or some of the study have recorded decreased scores in the Hamilton rating scale for depression.

The group, on completion of the counselling and yoga treatment sessions (second stage), had a decline in depression scores on the Hamilton rating scale for depression, compared to their scores on the same measure after the counselling treatment only (first stage).

The results of this study suggest that yoga and counselling has some influence in decreasing symptoms in clinical depression. A follow up post-study measurement was not implemented, however the author has some anecdotal evidence to suggest that at six week's post-study, some participants reported a continued decrease in symptoms of depression. It is intended the research will assist in directing professional practise to maximise effectiveness in therapy. It is also anticipated that counselling professionals will review alternative treatment to enhance and to increase effectiveness of treatment in major depression, not only within the university student population, but also in the wider community.

A follow up study using a larger sample size and control group would be foreseeable in the future to add to the validity of the benefits of yoga and counselling as part of a treatment plan for depression.

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Introduction:

Depressive disorders are common in primary care, the prevalence of both major and minor depression being 5%¹. Although antidepressant medication is both convenient and effective, there is considerable demand for alternative treatment², such as solution focused counselling, meditation and yoga. Solution focused treatment has been developed in this study as a brief (6 sessions) structured psychological treatment that can be delivered by trained professionals, for example, social worker/psychologist/counsellor. Yoga has been partially recognised in the literature as of some benefit in treatment of depression. However, some of these studies have been anecdotal and lack empirical validity. Carter & Byrne's study shows evidence of yoga having benefit in the treatment of depression³.

Many yoga and alternative practitioners may not know or even care if the medical establishment believes in yoga as a valid therapy for specific diseases, but there are practical reasons for encouraging scientific research into yoga's benefits. Insurance companies, the medical establishment and mental health practitioners are more likely to consider yoga as part of a treatment plan if research documents its effectiveness⁴. Research has taken place and continues in Eastern countries such as India, however Western medical journals appear slow to publish the research⁵. There are plenty of studies to find yoga has benefits for a variety of medical problems, however the majority of these studies are conducted in the East⁶. There are few studies conducted in the West to suggest that yoga has benefits for mental health disorders and if there is, the studies often lack scientific vigour. However research conducted jointly by the Philadelphia based Jefferson Medical College and Yoga Research Society in the United States, found that practitioners experienced a significant drop in cortisol levels after a single yoga class. High cortisol levels are

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characteristics of stress and serious depression⁷. However, these studies are not in abundance in Australia, but are encouraging nevertheless.

The researcher's interest in this study is due partially to the increasing interest in complementary treatments for depression in recent times. Also due to clients and society's increased level of interest in yoga and exploring different and enhancing treatment models. The study is to add to the body of knowledge in the area of complementary treatments for depression, as in the past there have been few studies in Australia that shows evidence of the value of yoga for treatment of mental health conditions and even fewer studies to show evidence of the value of counselling and yoga as a combined treatment.

This study examines whether yoga and counselling combined is more effective than counselling alone in the reduction in symptoms of major depression in the student population.

Methods:

Students were voluntarily recruited from referrals from the university medical practice and advertising in the student union newsletter, university radio commercials and also through the student counselling services at Charles Darwin University, Darwin, between February and April 2004.

Design:

A pilot study with a group having solution focused counselling conducted by the student counsellor fortnightly for 6 weeks and then the same group having a combination of yoga and solution focused counselling treatment two months later. It needs to be noted that there is no control/comparison group in this study. The researcher of the study conducted and implemented all the treatment. The counselling was given individually (due to confidentiality) and the yoga treatment was conducted in a group setting.

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Selection Criteria:

University general practitioners were asked to refer both male and female students aged 18 to 60 years old whom they judged to have a depression disorder that required treatment but not urgent hospital referral (who were interested in being involved in the study). Students were assessed within a week to determine whether they met the inclusion criteria: a probable or definite major depression which meets the DSMIV-TR criteria with a score of 13 or above on the 17 item Hamilton rating scale for depression and; a minimum duration of illness of four weeks. This was the first assessment process, occurring on an individual basis with the student counsellor. The students agreed to voluntarily participate in the study.

Students were excluded if they had an additional psychiatric disorder preceding the onset of depression, brain damage, learning difficulties, drug dependence, recent alcohol abuse, acute suicidal ideation, ongoing self harming behaviours, acute psychotic illness, serious physical illness, injury, pregnancy or had engaged in yoga as a long term practice.

Assignment:

Students received counselling for the first 6 weeks, (first stage) and then had a two-month break (due to semester holidays) then undertook counselling and yoga for further 6 weeks (second stage), after giving consent to participate in the study.

Treatment/Intervention:

Counselling treatment occurred over the first 6 weeks, each fortnight at the student counsellor's rooms at Charles Darwin University, three sessions in total for approximately one-hour duration per session. The student counsellor conducted this treatment. The first treatment began in first semester; mid April 2004. The counselling was conducted individually.

The second stage of the treatment was yoga and counselling combined, counselling again occurred over 6 weeks each fortnight at the student counsellor's rooms at Charles Darwin University,

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conducted by the student counsellor, three sessions in total for approximately one hour duration (given individually). This occurred in second semester, after university holidays, on fourth of August 2004. (There was a break for 2 months due to semester holidays as students were not available during that period).

Yoga treatment occurred on campus at the Charles Darwin University, for 6 weekly sessions of one hour duration. The student counsellor, who also is a registered fitness leader and stretch instructor/yoga practitioner, conducted this treatment with guidance from other yoga instructors. The yoga treatment was given within a group context. There was no control/comparison group.

At the end of the 12 weeks treatment program (excluding a two month break), a final assessment session occurred with the students and the counsellor, this involved discussing referral either back to referring doctor and/or more long term counselling and/or yoga if appropriate.

Solution focused Counselling:

Solution focused counselling was conducted by the student counsellor. Solution focused treatment focuses on “the here and now” and facilitates students use of their own skills and resources to make changes. It is explained to students that their psychological symptoms may be linked to interactional/systemic issues. Solution focused practice is concerned with solutions and how they work rather than problems and their causes. Solution focused practice aims to assist people to recognise and value their strengths and solution finding ability⁸. Solution focused practice aims to bring change in the way people think about the problem as well as what they do to resolve it. Solution focused counselling occurs in the following stages⁹:

1. Clarification and definition of the problem.
2. What the student wants to see change and goals of therapy.

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3. Discussion and exploration of strengths and times when the problem wasn't around.
4. Generation of solutions, and steps to achieve the solution, scaling questions used to elicit goals and solutions.
5. The Development of strategies to implement the preferred solutions.
6. Evaluation/review.

The sessions were of approximately one hour each in duration. All treatment was carried out by an experienced trained solution focused therapist and supervised by an experienced practitioner.

Yoga Therapy:

The student counsellor, who also is a registered fitness leader and yoga practitioner, gave the yoga therapy in consultation with yoga instructors. The yoga intervention was over 6 week period in combination with counselling; each yoga session lasted for one hour in duration. The group consisted of 7 participants, both male and female all in good physical health. Classes were conducted once a week for 6 weeks. The yoga routine was repeated each week, the routine being specifically formulated for depression. The yoga postures were derived mostly from instructions of B.K.S.Iyengar, world-renowned yoga leader, who claimed the yoga routine was specific for depression¹⁰.

Yoga authorities recommend three sessions per week of ninety minutes duration.¹¹. However Carter and Byrne's study was for six weekly sessions of one-hour duration using B.K.S. Iyengar's depression schedule and this study chose to follow Carter and Byrne's yoga treatment plan, which had shown some success¹². Furthermore, it was impractical and impossible for participants to commit to three weekly sessions of 1.5 hours for six weeks as well as counselling sessions, as these participants were university students who had study obligations, which prevented them from committing to this schedule. The yoga sessions were conducted for the whole group at the same

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time, no individual sessions were provided. This study is using the term yoga to refer to a series of physical postures, however the yoga sessions incorporated both the postures and breathing exercises.

Combined Treatment:

The same group were given combined treatment; both counselling and yoga for 6 weeks. This was run concurrently.

Assessments of outcome:

Students were assessed following each intervention. For example, every counselling and final closure session (7 in total) used the CES-D self-rating scale. The Hamilton depression rating scale was used at the following intervals; pre-study, post-first stage, pre-second stage and post-study. The student counsellor gave the assessments in every instance. The Hamilton rating scale for depression was assessed by the counsellor and CES-D self-rating scale for depression was self assessed by the participants.

Treatment received:

Of the nine students who entered the study; nine received the 3 solution focused counselling sessions on a fortnightly basis and then a combination of 6 yoga sessions weekly and 3 sessions of solution focused counselling fortnightly. Seven participants completed the entire study. Two participants discontinued participation in the study after the first stage was completed, due to family commitments.

Method of analysis:

Students were deemed to have clinically recovered if their score on the Hamilton rating scale for depression was 7 or less; students with scores of 8-12 were deemed partially recovered; and students with scores of 13 or more were deemed not recovered. Please see graphs in results section for details.

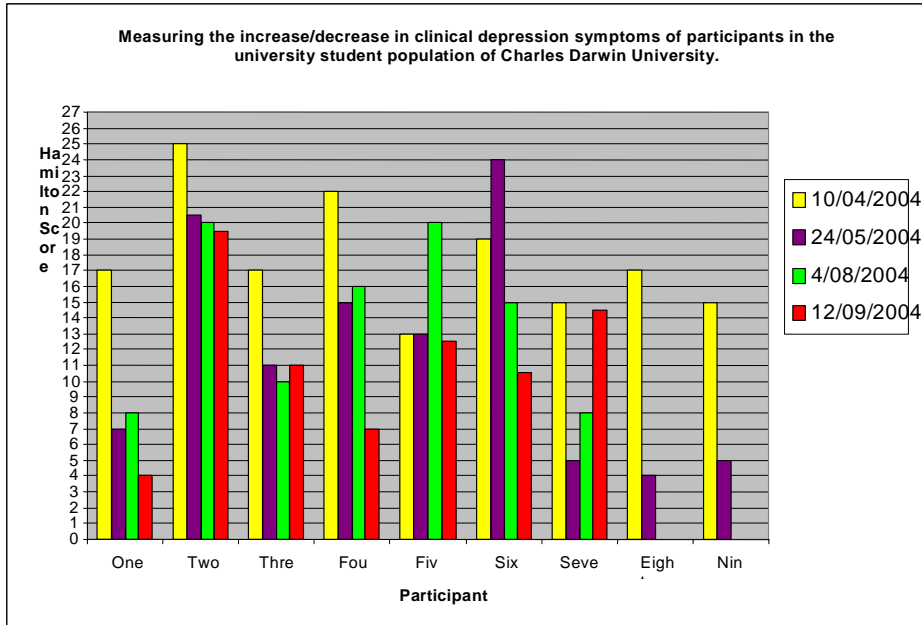
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Results:

Graph 1.

Hamilton Scale: 10-13 mild depression; 14-17 mild to moderate depression; >17 severe depression;

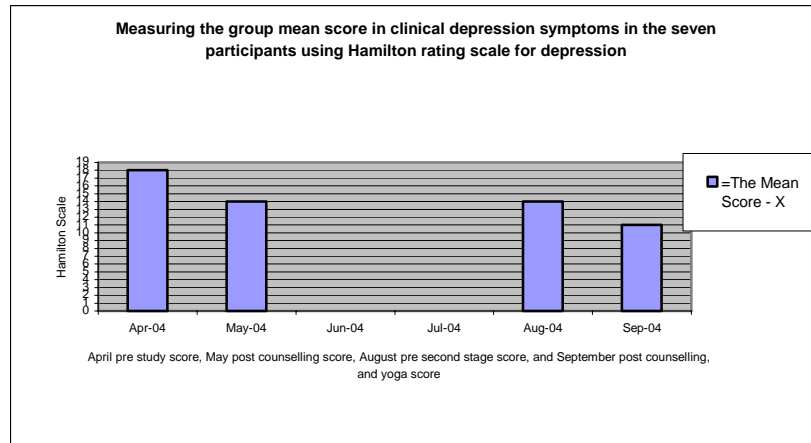
Pre-study score = yellow graph, Post counselling only intervention



score =purple graph, pre second stage score= green graph, post counselling and yoga intervention score= red graph

Graph 2:

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There were no significant differences in age, or severity of depression between eligible students who agreed to participate in the study. However, of the seven who completed the research, five were not on any anti-depressant medication. Two of the seven participants were on medication, primarily anti-depressants. Results are based on the Hamilton rating scale and self-assessment scale, administered at each counselling contact. Feedback from participants was also used as an informal evaluation tool. Participants were asked a series of questions about their experiences of the study, and its possible effect on their depression.

Of the nine participants, seven completed the entire study. Two people had scores of seven and below on the Hamilton rating scale for depression, therefore meeting the criteria of being clinically recovered from major depression. Another three participants had scores of 12 and below on the Hamilton rating scale for depression, meeting the criteria of being partially recovered from depression. The remaining two participants who completed the study had scores of 13 or above on the Hamilton rating scale and were deemed not to have recovered from major depression. All who completed the entire study, or completed some of the study, have recorded decreases in their scores in the Hamilton rating scale for depression. The mean scores for the group were the following; pre-study score was 18 on the Hamilton rating scale for depression which indicates severe depression, post-counselling only group (stage 1) score was 14 indicating mild to moderate depression. Pre-second stage score was maintained at 14, mild to moderate depression and post-counselling and yoga (stage 2)

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score was 11 indicating mild depression. The group mean scores have gradually decreased throughout the study. Hamilton rating scores for depression were consistent with the results of the CES-D self-rating scores for depression.

Findings:

Questions were asked of all participants at the final evaluation session. Some questions were based around the participants' experiences of being in the study and also included their views on managing their depression since the study's commencement, and the usefulness of the study.

All participants said the experience of being in the study was helpful and that they would participate again in a study if appropriate. Six participants stated they felt the study had helped them better manage their symptoms. One participant said their depression was still present, and was not sure if they were able to manage the depression symptoms any better now compared to prior to commencement of the study, but nevertheless being in the study was somewhat helpful. This participant acknowledged that an unforeseen personal issue compounded their symptoms of depression, which they believed impacted negatively on their depression scores.

The participants were asked if they were now more aware of their early warning signs/triggers of a depressive episode. Five participants said that they were more aware now after completing the study compared with prior to the study. Two participants said their awareness had not improved compared to prior to commencement of the study.

When asked what would have been a more helpful inclusion in the study, four participants said that they would have preferred more yoga sessions, while still include the counselling. Three participants had no comment on how the study might have been improved.

When asked what treatment options the participants would consider in the future, compared with prior to the study, six participants said that if they felt a problem should arise again, they would possibly seek a combination of counselling, exercise and yoga. With the exception of two participants, all said that they felt yoga was helpful, and would like to continue at some level with yoga in the future. Two participants also mentioned that they would access medical treatment

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and also consider medication as one part of a treatment plan to reduce the symptoms of depression.

Five participants felt the yoga and counselling combined was the most helpful, however two felt the counselling alone was most effective. It is interesting to note that one participant felt that counselling alone was more effective than counselling and yoga, (however this student did not participate in all the yoga sessions, as had the other participants).

At the conclusion of the counselling and yoga group sessions, of the seven who completed the whole study, five participants' results showed a marked decline on the Hamilton rating for depression compared with the counselling only groups' results on the same measurement scale.

Limitations:

It needs to be noted that the researcher of the study also provided treatment for the counselling group and yoga sessions. It is acknowledged that it would be preferable the researcher had not given all the treatments (to limit researcher contamination and bias), however due to a lack of funding for this research, the researcher was obligated to conduct the treatment personally.

Additionally the sample size of nine participants, reduced to seven students completing the whole study is an insufficient sample size to have statistically meaningful data.

It is also acknowledged that the study did not complete a six week post-treatment measurement, to measure whether the decrease in the scores were maintained without treatment. The researcher has some anecdotal evidence that for some participants the decrease in depressive symptoms was maintained post-study. It is also recognised that, one participant attended only one out of the six yoga sessions, due to outside commitments. This may have affected the possible benefit of yoga for that participant and therefore may have some bearing on the scores in the counselling and yoga section for that student. As the study was voluntary, it was challenging for the participants to juggle the study, university and work commitments. It needs to be acknowledged that the participants gave up considerable time and energy to participate in this study. It is also acknowledged that the study did not have a control/comparison group, thus making it

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impossible to compare treatment groups with non-treatment groups. This can hamper the measurement of the effectiveness of the treatments.

Discussion:

At the conclusion of the counselling and yoga group sessions, of the seven who completed the whole study, five participants' results showed a marked decline on the Hamilton rating for depression compared with the counselling only groups' results on the same measurement scale. This could possibly indicate that counselling and yoga combined is more effective in this study compared to counselling alone. However it must also be understood that other variables may have influenced these results and participants' opinions. For instance it needs to be acknowledged that the counselling only group commenced first, therefore by the second stage of this study, participants already had three counselling sessions prior to the counselling and yoga sessions. Did this help influence how people were dealing with their depression? If the counselling and yoga group had commenced first would there have been a different result? Was the two month break in the study too long, and did it therefore influence the attribution of effect?

Conclusion:

Of the seven who completed the entire study, five participants' depression results indicated that their yoga and counselling assessment score showed an overall decrease compared with the counselling only assessment score.

The group mean score on the Hamilton rating score for depression showed a decrease in major depression from severe to mild depression by the end of the study. This would indicate that yoga and counselling has some effect on the symptoms of major depression. It could also be suggested from the results, that yoga and counselling combined is slightly more effective than counselling alone. The group mean score (based on seven participants' scores) for post-counselling stage was 14, indicating mild to moderate depression, while the post-counselling and yoga group mean score was 11, indicating mild depression. Therefore, overall it would appear that counselling and yoga combined was slightly more effective than counselling alone, according to the group mean score.

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The results of this study suggest that yoga and counselling has some influence on the symptoms of major depression. A follow up post-study measurement was not implemented, however, the author has some anecdotal evidence to suggest that at six week's post-study, some participants reported a continuing decrease in symptoms of depression.

Applications of findings:

It is hoped that this study will influence treatment models sought in direct therapy practise for people experiencing major depression. It is anticipated that the results of the study will be published and discussed. It is intended that research may assist in directing professional practise to maximise effectiveness in therapy.

It is also anticipated that counselling professionals will review alternative treatment to enhance and increase the effectiveness of treatment in major depression, not only within the university student population, but also in the wider community. The author acknowledges that this study was a small pilot study, using a small sample size. A follow up study using larger sample sizes and implementing a control group would be foreseeable in the future to add to the validity of the benefits of yoga and counselling combined as part of a treatment model for depression.

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Endnotes:

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