### Research Paper Summary

This paper can be found in Google Docs at:

https://docs.google.com/document/d/1QQvNym8AtcklMaKzCgrNSU3TiWNdhbVxB1VbEblc45o/edit?usp=sharing

The article being summarized here is titled "The interventional effects of loving-kindness meditation on positive emotions and interpersonal interactions"<sup>2</sup>

# **Background**

I came across this paper quite by accident. My school has a program called advisory, which takes its inspiration from and uses a substantial amount of material from the <u>School Connect Curriculum</u><sup>1</sup>. At Northridge Academy High School it is a non-credit class for promoting Social and Emotional Learning (SEL) and has been used as a way of indoctrinating students into our school culture and creating an effective learning community for student support throughout their time with us.

Of course, our school still has its share of troubling issues, and our 10th grade advisory team has decided to tackle them head-on through an initiative called The Kindness Project. Ours is not unique, but it is also being designed to provide students the necessary prerequisites to earn service-learning credit with LAUSD, a graduation requirement for our school.

As part of this, students are required to do research before planning possible interventions to an identified problem and studying the effects of their work. During this process, several students ran across articles about something called loving-kindness meditation. The topic caught my eye because it seemed like it could be a promising tool for helping students in every kind of grouping better work together for positive outcomes. One of these articles is the object of this summary.

# **Topic**

This paper is what is called a "prospective study", according to <u>StatsDirect.net</u><sup>2</sup>, "A prospective study watches for outcomes, such as the development of a disease, during the study period and relates this to other factors such as suspected risk or protection factor(s). The study usually involves taking a cohort of subjects and watching them over a long period." In this case, the "study aimed to investigate the effects of loving-kindness meditation on positive emotions, intragroup interactions, and complex understanding of others" after being administered within a cohort of college freshmen.<sup>3</sup> Essentially, the question is this: <u>would loving-kindness meditation</u>, a form of non-transcendental <u>Buddhist meditation</u><sup>4</sup>, also called <u>Mettā</u> or <u>maitrī</u> or LKM, actually improve positive emotions in its practitioners in comparison with otherwise-similar non-practitioners.

# **Background**

The researchers reference eleven other studies in the introduction to their own research by way setting the context and motivation for their work. However, after briefly surveying the Wikipedia article on this technique, which is quite literally a part of several ancient Eastern philosophies, it seems that research on the purported benefits of other meditation techniques, most notably <u>Transcendental Meditation</u><sup>5</sup>, have

yielded results of debatable quality. The Wikipedia articles on both of the techniques cite authors who caution reliance on existing studies since. For LKM, this caution was made in particular: "the results were inconclusive for some outcomes, in particular against active controls; the methodological quality of the reports was low to moderate; results suffered from imprecision due to wide CIs deriving from small studies"<sup>[6]</sup>

### **Methods**

The study was conducted on 55 freshmen with an average age of 18.5 years who were split into two groups by random-number generated lottery of those taught meditation techniques (25) and those not (30). Assessment of intervention was achieved with two instruments: the Differential Emotions Scale (DES) to measure *intrapersonal* effects and the Inclusion of Other in Self (IOS) Scale to measure *interpersonal* effects. As an outsider to the field, these names sounded actually quite preposterous, but the IOS scale in particular seems to actually have some reliable statistical validity<sup>7</sup>. Measurement by each instrument was done at consistent intervals and measurements were correlated against longitudinal data of the same measure and against simultaneous data across the two measures to form a complex. Other measurements were made with a "complex understanding scale... derived from the revised attributed program of antonyms group"<sup>2</sup>, the source of which the authors cited in their paper (but which I'll leave alone because I already have too many citations in this "summary" anyway).

### Procedure:

Students receiving the meditation instruction did so for "4 weeks, three times a week, about 30 minutes each time". The actual meditation techniques involved breathing and visualization and were taught with video clips. The measuring instruments (DES, IOS, and antonym groups) were applied five days prior to instruction (or non-instruction) and then the day after instruction all throughout each week of being in the program, although it is not clear from the article if the four weeks of instruction were contiguous or non-contiguous.

# **Results**

Essentially, it looks like the LKM increased occurrence of positive emotion, intergroup interactions, and complex understanding of others and conversely decreased negative emotion in comparison with baseline data and control group data to a statistically significant level.

#### Conclusion

Essentially, because this study was conducted on Chinese freshmen, it has been reported that 7.8% of them have some sort of diagnosable psychiatric symptom - most likely due to stress - so anything that can help alleviate the issue is good. In my opinion, the idea that something so inexpensive might help is very good news indeed, especially as my students may not share a number of demographics in common with Chinese college freshmen, but having spent time gathering anecdotal data from students of middle school, high school, and college age from many parts of the world, school stress has more or less the same features for everybody.

James Rice SED 625 Fall 2016

The authors caution that the study is very small, however, so the reliability of the results is still up for debate. Personally, while I am not so sanguine about using religiously-based social-emotional strategies in my own classroom for the sake of avoiding conflicts over the separation of church and state, and because my own spiritual background makes me deeply cautious about accepting practices from other sources uncritically, the general idea of making a deliberate and disciplined practice of wishing others well and making an effort to see the common ground we all have, even with those we most commonly come into conflict with, seems to me a very good thing and worth exploring.

As it stands, with LAUSD's upward push on restorative justice practices, where schools are being retrained to make restoration and re-integration of offenders into the community the number one priority for the sake of *recovering instructional time*, then I could see this LKM practice being a simple, low-cost way to augment the process.

### **Reference List**

- 1. Student Advisory | School-Connect Social-Emotional and Academic Skills Curriculum. (n.d.). Retrieved December 19, 2016, from http://www.school-connect.net/student-advisory.html
- Shi, W., He, X., Han, X., Wang, N., Zhang, N., & Wang, X. (2015). The interventional effects of loving-kindness meditation on positive emotions and interpersonal interactions. *Neuropsychiatric Disease and Treatment*, 1273. doi:10.2147/ndt.s79607
- 3. Prospective vs. Retrospective Studies. (n.d.). Retrieved December 19, 2016, from <a href="http://www.statsdirect.com/help/basics/prospective.htm">http://www.statsdirect.com/help/basics/prospective.htm</a>
- 4. Mettā. (n.d.). Retrieved December 19, 2016, from <a href="https://en.wikipedia.org/wiki/Mett%C4%81">https://en.wikipedia.org/wiki/Mett%C4%81</a>
- 5. Transcendental Meditation. (n.d.). Retrieved December 19, 2016, from <a href="https://en.wikipedia.org/wiki/Transcendental\_Meditation">https://en.wikipedia.org/wiki/Transcendental\_Meditation</a>
- 6. Galante, J., Galante, I., Bekkers, M., & Gallacher, J. (2014). Effect of kindness-based meditation on health and well-being: A systematic review and meta-analysis. *Journal of Consulting and Clinical Psychology*, 82(6), 1101-1114. doi:10.1037/a0037249
- 7. Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of Other in the Self Scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, *63*(4), 596-612. doi:10.1037//0022-3514.63.4.596