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Guided Imagery and Progressive Muscle Relaxation in Group Psychotherapy

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First line of abstract not indented The second page usually contains your abstract, which is a summary of your paper. The abstract should indented Include your topic, purpose/thesis, sources, and conclusions. Some instructors may tell you not to include an abstract for a short paper. Unless the instructor tells you to omit this section, go ahead and include it. The abstract generally has around 150 words, based on instructor or journal requirements (make sure you do not exceed abstract word limits). The abstract is one paragraph, left justified, with no indentation (i.e., "block" style). Note that the title "Abstract" is on the first line of this page and is not bolded or italicized or underlined. See APA manual section 2.04 to read about the abstract. Also note that the running head is at the top of the page along with the page number – noting how the running head changes from page 1 to the rest of the paper. See APA manual section 8.03 (Order of manuscript

pages > title page) to read a bit about the running head.

No extra space between abstract and keywords

"Keywords" in italics and indented (0.5 in) rate

Keywords: college teaching, student evaluations of teaching, online administration, response in)

Do not number headings, double line-space for headings, do not add blank lines above/below headings.

Level-1 heading: Centered, bold, (if English) title case

Double line spacing, justify text left, not both sides

Indent first line of

tion, 2017). Thus, an important goal of psychological research is to evaluate techniques that promote tress reduction and relaxation. Two techniques that have been associated with reduced stress and increased relaxation in psychotherapy contexts are guided imagery and progressive muscle relaxation (McGuigan & Lehrer, 2007). Guided imagery aids individuals in connecting their internal and external experiences, allowing them, for example, to feel calmer externally because they practice thinking about calming imagery. Progressive muscle relaxation involves diaphragmatic breathing and the tensing and

Guided Imagery and Progressive Muscle Relaxation in Psychotherapy

A majority of Americans experience stress in their daily lives (American Psychological Associa-

Never use «introduction»

as first heading

releasing of 16 major muscle groups; together these behaviors lead individuals to a more relaxed state (Jacobson, 1938; Trakhtenberg, 2008). Guided imagery and progressive muscle relaxation are both cognitive behavioral techniques (Yalom & Leszcz, 2005) in which individuals focus on the relationship

among thoughts, emotions, and behaviors (White, 2000).

Group psychotherapy effectively promotes positive treatment outcomes in patients in a costparagraph 1.3 cm (0.5 in). effective way. Its efficacy is in part attributable to variables unique to the group experience of therapy as compared with individual psychotherapy (Bottomley, 1996; Yalom & Leszcz, 2005). That is, the group format helps participants feel accepted and better understand their common struggles; at the same time, interactions with group members provide social support and models of positive behavior (Yalom & Leszcz, 2005). Thus, it is useful to examine how stress reduction and relaxation can be enhanced in a group context.

Theoretical Background: Guided Imagery and Progressive Muscle Relaxation

Theoretical Background: Guided Imagery – This is a Level 2 Heading

Level-2 heading: Left, bold, (if English) title case

Guided imagery involves a person visualizing a mental image and engaging each sense (e.g., sight, smell, touch) in the process. Guided imagery was first examined in a psychological context in the 1960s, when the behavior theorist Joseph Wolpe helped pioneer the use of relaxation techniques such

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as aversive imagery, exposure, and imaginal flooding in behavior therapy (Achterberg, 1985; Utay & Miller, 2006). Patients learn to relax their bodies in the presence of stimuli that previously distressed them, to the point where further exposure to the stimuli no longer provokes a negative response (Achterberg, 1985).

Features of Guided Imagery - This is a Level 3 Heading

Level-**3** heading: Left, bold, italic, (if English) title case

Guided imagery involves a person visualizing a mental image and engaging each sense (e.g., sight, smell, touch) in the process. Guided imagery was first examined in a psychological context in the 1960s, when the behavior theorist Joseph Wolpe helped pioneer the use of relaxation techniques such as aversive imagery, exposure, and imaginal flooding in behavior therapy (Achterberg, 1985; Utay & Miller, 2006). Patients learn to relax their bodies in the presence of stimuli that previously distressed them, to the point where further exposure to the stimuli no longer provokes a negative response (Achterberg, 1985).

Contemporary research supports the efficacy of guided imagery interventions for treating medical, psychiatric, and psychological disorders (Utay & Miller, 2006). Guided imagery is typically used to pursue treatment goals such as improved relaxation, sports achievement, and pain reduction. Guided imagery techniques are often paired with breathing techniques and other forms of relaxation, such as mindfulness (see Freebird Meditations, 2012). The evidence is sufficient to call guided imagery an effective, evidence-based treatment for a variety of stress-related psychological concerns (Utay & Miller, 2006).

Guided Imagery in Group Psychotherapy

Guided imagery exercises improve treatment outcomes and prognosis in group psychotherapy contexts (Skovholt & Thoen, 1987). Lange (1982) underscored two such benefits by showing (a) the role of the group psychotherapy leader in facilitating reflection on the guided imagery experience, including

difficulties and stuck points, and (b) the benefits achieved by social comparison of guided imagery experiences between group members. Teaching techniques and reflecting on the group process are unique components of guided imagery received in a group context (Yalom & Leszcz, 2005).

Empirical research focused on guided imagery interventions supports the efficacy of the technique with a variety of populations within hospital settings, with positive outcomes for individuals diagnosed with depression, anxiety, and eating disorders (Utay & Miller, 2006). Guided imagery and relaxation techniques have even been found to "reduce distress and allow the immune system to function more effectively" (Trakhtenberg, 2008, p. 850). For example, Holden-Lund (1988) examined effects of a guided imagery intervention on surgical stress and wound healing in a group of 24 patients. Patients listened to guided imagery recordings and reported reduced state anxiety, lower cortisol levels following surgery, and less irritation in wound healing compared with a control group. Holden-Lund concluded that the guided imagery recordings contributed to improved surgical recovery. It would be interesting to see how the results might differ if guided imagery was practiced continually in a group context.

Guided imagery has also been shown to reduce stress, length of hospital stay, and symptoms related to medical and psychological conditions (Scherwitz et al., 2005). For example, Ball et al. (2003) conducted guided imagery in a group psychotherapy format with 11 children (ages 5–18) experiencing recurrent abdominal pain. Children in the treatment group (n = 5) participated in four weekly group psychotherapy sessions where guided imagery techniques were implemented. Data collected via pain diaries and parent and child psychological surveys showed that patients reported a 67% decrease in pain. Despite a small sample size, which contributed to low statistical power, the researchers concluded that guided imagery in a group psychotherapy format was effective in reducing pediatric recurrent ab-dominal pain.

However, in the majority of guided imagery studies, researchers have not evaluated the technique in the context of traditional group psychotherapy. Rather, in these studies participants usually

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met once in a group to learn guided imagery and then practiced guided imagery individually on their own (see Menzies et al., 2014, for more). Thus, it is unknown whether guided imagery would have different effects if implemented on an ongoing basis in group psychotherapy.

Method

Begin the method section with a Level One heading, and the section would follow directly after my literature review or background section. The Method, Result, and Discussion sections do not start on a new page, unless you are given specific instructions to do otherwise.

Participants and Procedures

starts with a One hundred participants completed an online study, five of them had to be excluded because number, spell it they failed the attention check questions, resulting in a final sample of N = 95. The sample consisted of

45% women, three refused to report gender; the mean age was 23 years (SD = 4, range 18 to 32). The

data were collected between December and January 2020, the study was approved by the ethics com-

mittee at the University of Basel.

Measures

If sentence

This is another common sub-section you might see in the Method portion of a research paper.

To measure personality, we used the NEO-PIR personality inventory (Reference, Year). Reaction time

was measured in milliseconds precision.

Analysis

Analyses were conducted in R statistics (v4.0). Add more information about the analysis, for instance the types of models that you used.

Results

My results section would also start with a Level One heading! This is where you would report your numbers. This is one of the drier portions of your paper – it does not typically include commentary or many (if any) citations. This section is very to-the-point. In the results section it makes sense to use

For 0-9 use

words, for

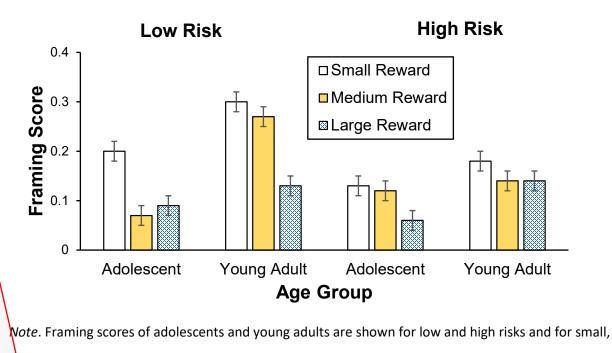
> 9 use numbers. tables and figures. Below you see how you have to format a correlation table, don't forget that every table needs to be referenced in the text.

In the results section you may usually report descriptive and inferential statistics. You may want to report how many participants did something (n = 24) compared to ones that did another thing (n =74). The descriptive statistics may include a difference between one group (M = 0.23, SD = 0.12) compared to another group (M = 0.67, SD = 0.09). The results section usually presents numbers in the text, but is written in a way that makes the numbers well digestible and embeds them into the text. Importantly, the results section has to be as precise as possible. Here comes one example from the APA homepage. It makes sense to illustrate the main findings either in a figure or a table. If doing so, it is important to remember that all figures and tables need to be referenced in the main text.

Figure 1

Table and figure numbers above the table/figure. Numbers ("Figure 1") in bold and titles ("Framing ...") underneath in italics. Both are double spaced and <u>not</u> indented.

Framing Scores for Different Reward Sizes



Notes below tables or figures double spaced and <u>not</u> indented. 7

medium, and large rewards (error bars show standard errors).

Response rate correlations are presented in Table 1. The findings indicate that response rates

for face-to-face courses were much higher than for online courses, but only when face-to-face course
evaluations were administered in the classroom. In the Year 3 administration, when all course evalua-
tions were administered online, response rates for face-to-face courses declined ($M = 47.18\%$, $SD = \begin{cases} breviations in italics ("n", "tal" "CD") \\ brevia$
20.11), but were still slightly higher than for online courses ($M = 41.60\%$, $SD = 18.23$). These findings pro-"M", "SD")
duced a statistically significant interaction between course delivery method and evaluation year, F(1.78,
716) = 101.34, MSE = 210.61, $p < .001$. ¹ The strength of the overall interaction effect was .22 (η_p^2). Sim-
ple main-effects tests revealed statistically significant differences in the response rates for face-to-face
courses and online courses for each of the 3 observation years. ² The greatest differences occurred dur-
ing Year 1 ($p < .001$) and Year 2 ($p < .001$), when evaluations were administered on paper in the class-
room for all face-to-face courses and online for all online courses. No other factors or interactions in-
cluded in the analysis were statistically reliable.

Table 1

Table and figure numbers above the table/figure. Numbers ("Table 1") in bold and titles ("Descriptive ...") underneath in italics. Both are double spaced and <u>not</u> indented.

Descriptive Statistics and Correlations for Study Variables

Statistics abbreviations in italics	n	М	SD	1	2	3	4	5	6	7
1. Internal–ex-	3,697	0.43	0.49	—	I	Lines above and below title row and				
ternal status ^a		below table, not in table						n table b	ody.	
2. Manager job	2,134	3.14	0.62	08**	—					
performance										

¹ A Greenhouse–Geisser adjustment of the degrees of freedom was performed in anticipation of a sphe-

ricity assumption violation.

² A test of the homogeneity of variance assumption revealed no statistically significant difference in re-

sponse rate variance between the two delivery modes for the 1st, 2nd, and 3rd years.

Footnotes in

size 10 or 9

3. Starting sal-	3,697	1.01	0.27	.45**	01	—						
ary ^b												
4. Subsequent	3,697	0.33	0.47	.08**	07**	.04*	—					
5. Organiza-	3,697	6.45	6.62	29**	.09**	.01	.09**	Cell content can be single- spaced, one-and-a-half-				
tional tenure										uble-space		
6. Unit service	3,505	85.00	6.98	25**	39**	.24**	.08**	pending on size of table and what makes it easiest to read				
performance ^c												
7. Unit financial	694	42.61	5.86	.00	03	.12*	07	02	.16**	—		
performance ^c												

^a0 = internal hires and 1 = external hires.

^b A linear transformation was performed on the starting salary values to maintain pay practice confidentiality. The standard deviation (0.27) can be interpreted as 27% of the average starting salary for all managers. Thus, ±1 *SD* includes a range of starting salaries from 73% (i.e., 1.00 – 0.27) to 127% (i.e., 1.00 +

0.27) of the average starting salaries for all managers.

^c Values reflect the average across 3 years of data.

^{*}*p* < .05. ^{**}*p* < .01.

Summary

Notes below tables

or figures double

spaced and not

indented.

After the results, which are focused on numerical information, it makes sense to add a small discussion where you explain what the numbers mean. Unlike the results section, the discussion section is where you get to dig into what your numbers mean!

Conclusion Which is Also Called General Discussion

Start the conclusion with a concise and focused repetition of your research question and the one main finding. This shold be no more than a few sentences and include no numbers. Then discuss, for instance, the following topics: How do the results compare to past research? Was your hypothesis supported? Did your study have any limitations? What should be fixed in future studies? What should future research look at? What should we do next?

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Implications for Existing Theory

Our result that mental imagers is less important in children compared to adults stands in contrast with a common theoretical assumption, that mental imagery matters independent of age (Refrence). However, this result is more in line with work by Author (Year) that has shown that metacognitive skills, which develop only in puberty, are necessary for mental imagery.

Secondly, our result that xyz confirms the theory that ...

References

Achterberg, J. (1985). Imagery in healing. Shambhala Publications.

American Psychological Association. (2017). Stress in America: The state of our nation.

https://www.apa.org/news/press/releases/stress/2017/state-nation.pdf

Baider, L., Uziely, B., & Kaplan De-Nour, A. (1994). Progressive muscle relaxation and guided imagery in

Hanging indent of 1.3 cm (0.5 inch) cancer patients. *General Hospital Psychiatry*, *16*(5), 340–347. <u>https://doi.org/10.1016/0163-8343(94)90021-3</u>

- Ball, T. M., Shapiro, D. E., Monheim, C. J., & Weydert, J. A. (2003). A pilot study of the use of guided imagery for the treatment of recurrent abdominal pain in children. *Clinical Pediatrics*, 42(6), 527– 532. <u>https://doi.org/10.1177/000992280304200607</u>
- Bernstein, D. A., & Borkovec, T. D. (1973). *Progressive relaxation training: A manual for the helping professions*. Research Press.
- Bottomley, A. (1996). Group cognitive behavioural therapy interventions with cancer patients: A review of the literature. *European Journal of Cancer Cure*, *5*(3), 143–146.

https://doi.org/10.1111/j.1365-2354.1996.tb00225.x

Cohen, M., & Fried, G. (2007). Comparing relaxation training and cognitive-behavioral group therapy for women with breast cancer. *Research on Social Work Practice*, *17*(3), 313–323.

https://doi.org/10.1177/1049731506293741

- Cunningham, A. J., & Tocco, E. K. (1989). A randomized trial of group psychoeducational therapy for cancer patients. *Patient Education and Counseling*, *14*(2), 101–114. <u>https://doi.org/10.1016/0738-</u> <u>3991(89)90046-3</u>
- Freebird Meditations. (2012, June 17). *Progressive muscle relaxation guided meditation* [Video]. YouTube. <u>https://www.youtube.com/watch?v=fDZI-4udE_o</u>

- Hardy, K. (2017, October 8). Mindfulness is plentiful in "The post-traumatic insomnia workbook." *Veterans Training Support Center*. <u>http://bit.ly/2D6ux8U</u>
- Hashim, H. A., & Zainol, N. A. (2015). Changes in emotional distress, short term memory, and sustained attention following 6 and 12 sessions of progressive muscle relaxation training in 10–11 years old primary school children. *Psychology, Health & Medicine, 20*(5), 623–628.

https://doi.org/10.1080/13548506.2014.1002851

Holden-Lund, C. (1988). Effects of relaxation with guided imagery on surgical stress and wound healing. *Research in Nursing & Health*, 11(4), 235–244. <u>http://doi.org/dztcdf</u>

Jacobson, E. (1938). *Progressive relaxation* (2nd ed.). University of Chicago Press.

- Lange, S. (1982, August 23–27). A realistic look at guided fantasy [Paper presentation]. American Psychological Association 90th Annual Convention, Washington, DC.
- McCallie, M. S., Blum, C. M., & Hood, C. J. (2006). Progressive muscle relaxation. *Journal of Human Behavior in the Social Environment*, 13(3), 51–66. <u>http://doi.org/b54qm3</u>
- McGuigan, F. J., & Lehrer, P. M. (2007). Progressive relaxation: Origins, principles, and clinical applications. In P. M. Lehrer, R. L. Woolfolk, & W. E. Sime (Eds.), *Principles and practice of stress management* (3rd ed., pp. 57–87). Guilford Press.
- Menzies, V., Lyon, D. E., Elswick, R. K., Jr., McCain, N. L., & Gray, D. P. (2014). Effects of guided imagery on biobehavioral factors in women with fibromyalgia. *Journal of Behavioral Medicine*, *37*(1), 70–80. https://doi.org/10.1007/s10865-012-9464-7
- Peterson, A. L., Hatch, J. P., Hryshko-Mullen, A. S., & Cigrang, J. A. (2011). Relaxation training with and without muscle contraction in subjects with psychophysiological disorders. *Journal of Applied Biobehavioral Research*, *16*(3–4), 138–147. <u>https://doi.org/10.1111/j.1751-9861.2011.00070.x</u>
- Rausch, S. M., Gramling, S. E., & Auerbach, S. M. (2006). Effects of a single session of large-group meditation and progressive muscle relaxation training on stress reduction, reactivity, and recovery.

International Journal of Stress Management, 13(3), 273–290. https://doi.org/10.1037/1072-

5245.13.3.273

- Scherwitz, L. W., McHenry, P., & Herrero, R. (2005). Interactive guided imagery therapy with medical patients: Predictors of health outcomes. *The Journal of Alternative and Complementary Medicine*, *11*(1), 69–83. <u>https://doi.org/10.1089/acm.2005.11.69</u>
- Skovholt, T. M., & Thoen, G. A. (1987). Mental imagery and parenthood decision making. *Journal of Counseling & Development*, 65(6), 315–316. <u>http://doi.org/fzmtjd</u>
- Trakhtenberg, E. C. (2008). The effects of guided imagery on the immune system: A critical review. *International Journal of Neuroscience*, *118*(6), 839–855. <u>http://doi.org/fxfsbq</u>
- Utay, J., & Miller, M. (2006). Guided imagery as an effective therapeutic technique: A brief review of its history and efficacy research. *Journal of Instructional Psychology*, *33*(1), 40–43.
- White, J. R. (2000). Introduction. In J. R. White & A. S. Freeman (Eds.), *Cognitive-behavioral group therapy: For specific problems and populations* (pp. 3–25). American Psychological Association. <u>https://doi.org/10.1037/10352-001</u>

Yalom, I. D., & Leszcz, M. (2005). The theory and practice of group psychotherapy (5th ed.). Basic Books.

 Yu, S. F. (2004). Effects of progressive muscle relaxation training on psychological and health-related quality of life outcomes in elderly patients with heart failure (Publication No. 3182156) [Doctoral dissertation, The Chinese University of Hong Kong]. ProQuest Dissertations and Theses Global.