

Communication 616 (20904D)
Meta-Analysis in Health Communication
Annenberg School for Communication
Fall, 2022

Instructor: Professor Lynn Carol Miller

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Instructor: Professor Miller

Overview and Course Description. A major goal in this course is to provide you with valuable skills in conducting *a data-based review* using a statistical procedure for combining data from multiple separate studies (i.e., meta-analysis). **Our focus here is on the use of meta-analysis in Health Communication but meta-analysis is a valuable tool producing many -- typically extremely well cited -- publications in communication and social science.**

A meta-analysis can be used to identify the mean “effect size” across these separate studies (e.g., mean effect size difference between a treatment and control group; correlations between an x and a y). Where individual study effect sizes vary across studies, meta-analysis can afford insight into the source of this variability. Within communication, meta-analyses are often published in our top journals, including in the *Journal of Communication*. Some recent examples of meta-analyses in JOC include the following:

- Bigsby, E., & Albarracín, D., (2022). Self- and Response Efficacy Information in Fear Appeals: A Meta-Analysis, *Journal of Communication*, 72 (2), 241–263, <https://doi.org/10.1093/joc/jqab048>
- Hermann, E., Morgan, M., & Shanahan, J. (2021). Television, Continuity, and Change: A Meta-Analysis of Five Decades of Cultivation Research, *Journal of Communication*, 71(4), 515-544, <https://doi.org/10.1093/joc/jqab014>
- Kuang, K., Wilson, S. R. (2017). A Meta-Analysis of Uncertainty and Information Management in Illness Contexts, *Journal of Communication*, 67(3), 378–401, <https://doi.org/10.1111/jcom.12299>
- Oschatz, C. & Marker, C. (2020), Long-term Persuasive Effects in Narrative Communication Research: A Meta-Analysis, *Journal of Communication*, 70(4), 473–496, <https://doi.org/10.1093/joc/jqaa017>
- Nanz, A, & Matthes, J. (2022). Democratic Consequences of Incidental Exposure to Political Information: A Meta-Analysis, *Journal of Communication*, 72(3), 345–373, <https://doi.org/10.1093/joc/jqac008>
- Tukachinsky, R., Walter, N, & Saucier, C. J. (2020). Antecedents and effects of parasocial relationships: A Meta-Analysis, *Journal of Communication*, 70(6), 868-894, <https://doi.org/10.1093/joc/jqaa034>
- Van der Pas, D. J., & Aaldering, L., (2020). Gender differences in political media coverage: A Meta-Analysis, *Journal of Communication*, 70(1), 114–143, <https://doi.org/10.1093/joc/jqz046>
- Walter, N., Tukachinsky, R., Pelled, A., & Nabi, R. (2019). Meta-Analysis of Anger and Persuasion: An Empirical Integration of Four Models, *Journal of Communication*, (69, 1) 73–93, <https://doi.org/10.1093/joc/jqy054>

Meta-analyses are performed in most areas of communication where quantitative studies are conducted, but often these are especially prominent in health communication (where intervention studies are common) and are frequent in other areas (e.g., political communication) and/or in areas where the basic underlying mechanisms measured (e.g., persuasion processes, interpersonal

processes) or population differences (e.g., in gender, race, ethnicity, culture) across studies are of interest. Within psychology, well conducted meta-analyses are also published in top journals, such as *Health Psychology and Psychological Bulletin*.

- Baird, H. M., Webb, T. L., Sirois, F. M., & Gibson-Miller, J. (2021). Understanding the effects of time perspective: A meta-analysis testing a self-regulatory framework. *Psychological Bulletin, 147*(3), 233-267. doi: <https://doi.org/10.1037/bul0000313>
- Berry, M. P., Sala, M., Abber, S. R., & Forman, E. M. (2021). Incorporating automated digital interventions into coach-delivered weight loss treatment: A meta-analysis. *Health Psychology, 40*(8), 534-545. doi: <https://doi.org/10.1037/hea0001106>
- Hagger, M. S., Cheung, M. W. -, Ajzen, I., & Hamilton, K. (2022). Perceived behavioral control moderating effects in the theory of planned behavior: A meta-analysis. *Health Psychology, 41*(2), 155-167. doi:<https://doi.org/10.1037/hea0001153>
- Kim, H. M., & Miller, L. C. (2020). Are insecure attachment styles related to risky sexual behavior? A meta-analysis. *Health Psychology, 39*(1), 46-57. doi:<https://doi.org/10.1037/hea0000821>
- McCarrick, D., Prestwich, A., Prudenzi, A., & O'Connor, D. B. (2021). Health effects of psychological interventions for worry and rumination: A meta-analysis. *Health Psychology, 40*(9), 617-630. doi:<https://doi.org/10.1037/hea0000985>
- Park, J. W., Mealy, R., Saldanha, I. J., Loucks, E. B., Needham, B. L., Sims, M., . . . Howe, C. J. (2022). Multilevel resilience resources and cardiovascular disease in the United States: A systematic review and meta-analysis. *Health Psychology, 41*(4), 278-290. doi:<https://doi.org/10.1037/hea0001069>
- Pascoe, E. A., Lattanner, M. R., & Richman, L. S. (2022). Meta-analysis of interpersonal discrimination and health-related behaviors. *Health Psychology, 41*(5), 319-331. doi:<https://doi.org/10.1037/hea0001147>
- Sheeran, P., Wright, C. E., Avishai, A., Villegas, M. E., Rothman, A. J., & Klein, W. M. P. (2021). Does increasing autonomous motivation or perceived competence lead to health behavior change? A meta-analysis. *Health Psychology, 40*(10), 706-716. doi:<https://doi.org/10.1037/hea0001111>
- Torka, A., Mazei, J., & Hüffmeier, J. (2021). Together, everyone achieves more—or, less? an interdisciplinary meta-analysis on effort gains and losses in teams. *Psychological Bulletin, 147*(5), 504-534. doi:<https://doi.org/10.1037/bul0000251>
- Tran, U. S., Birnbaum, L., Burzler, M. A., Hegewisch, U. J. C., Ramazanova, D., & Voracek, M. (2022). Self-reported mindfulness accounts for the effects of mindfulness interventions and nonmindfulness controls on self-reported mental health: A preregistered systematic review and three-level meta-analysis of 146 randomized controlled trials. *Psychological Bulletin, 148*(1-2), 86-106. doi:<https://doi.org/10.1037/bul0000359>

Meta-analyses are often the first (publishable) step in getting a handle on a research area, planning a grant, and identifying what research is most needed (and therefore more likely to be published, funded, etc.). Assuming you finish a meta-analysis in an area before a similar one, especially if this is an important area in the field, this should be highly publishable. It's a great way for new scholars to establish credentials in a domain and network (by needing to contact authors) in that domain. A meta-analysis is often a highly cited article for researchers – important when you come up for tenure and promotion.

Learning Objectives:

- 1. Learn how to conceptualize, conduct, code, analyze (using comprehensive meta-analysis software), and write up your own meta-analysis article relevant to health communication prevention that serves as a good first draft for a publishable article for your outlet of interest.**
- 2. Gain experience reviewing and critiquing journal articles and meta-analyses in active research areas in health communication**
- 3. Special focus on target populations particularly at risk for mental and physical health disorders. Special section on Diversity/Discrimination and Health.**

In this course, there is a primary text for meta-analysis (see below) designed to work with the meta-analysis software we will use in the class (***Comprehensive Meta-Analysis Software***). There is another text that is focused less on the statistical aspects of a meta-analysis and more on the conceptual aspects of deciding upon, coding, choosing variables, and so forth in conducting a meta-analysis.

Textbooks:

Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2021). *Introduction to meta-analysis* (2nd ed.). John Wiley & Sons, Inc. <https://www.amazon.com/Introduction-Meta-Analysis-Michael-Borenstein/dp/1119558352> (referred to in assignments as BHHR2021)

Cooper, H., Hedges, L. V., & Valentine, J. C (Eds.). (2019). *The handbook of research synthesis and meta-analysis* (3rd ed.). Russel Sage Foundation. Kindle Edition (referred to in assignments as H2019).

Readings (outside of text readings) will be posted via blackboard weekly – see following list by date.

Software: Comprehensive Meta-Analysis

<http://www.meta-analysis.com> (this is the easiest meta-analysis software to use).

Annenberg has purchased some versions of the professional version for your use (depending upon the number of students who enroll we may have enough copies for everyone or they may need to be shared). Requirements for software (Platform (XP, Vista, Windows 7, Windows 8, Windows 10; (32-bit or 64-bit)) Screen (XGA or higher); Disk Space (25MB))

NOTE: IF YOU HAVE A MAC YOU MUST GET A WINDOWS EMULATOR (SINCE THE PROGRAM DOES NOT RUN ON A MAC OTHERWISE). THE OPTIONS INCLUDE PARALLELS AND BOOTCAMP (using Wine or CrossOver is not recommended) and you'll need a version of windows).

Requirements/Evaluation Criteria:

10% Class Participation

20% Oral Presentation of Final Review & Meta-Analysis Paper

20% Homework Assignments on Meta-Analysis (MH; Some of these involve power point presentations for class that should be turned in on Sunday by 5PM prior to Monday class; Homework is designed to help you develop a viable draft of your final project). Note there are 24 MH points so some flexibility if you can't turn it in on time or be present in class.

50% Final Meta-Analysis Paper

Grading Scale

94 to 100%: A	80% to 83%: B-	67% to 69%: D+
90% to 93%: A-	77% to 79%: C+	64% to 66%: D
87% to 89%: B+	74% to 76%: C	60% to 63%: D-
84% to 86%: B	70% to 73%: C-	0% to 59%: F

Grading Standards

Letter Grade	Description
A	Excellent; demonstrates extraordinarily high achievement; comprehensive knowledge and understanding of subject matter; all expectations met and exceeded.
B	Good; moderately broad knowledge and understanding of subject matter; explicitly or implicitly demonstrates good, if not thorough understanding; only minor substantive shortcomings.
C	Satisfactory/Fair; reasonable knowledge and understanding of subject matter; most expectations are met; despite any shortcomings, demonstrates basic level of understanding.
D	Marginal; minimal knowledge and understanding of subject matter; more than one significant shortcoming; deficiencies indicate only the most rudimentary level of understanding.
F	Failing; unacceptably low level of knowledge and understanding of subject matter; deficiencies indicate lack of understanding.

Grading Timeline

For effective learning, students should receive timely feedback on assignments and exams. Therefore, every attempt will be made to grade assignments/exams and post grades within two weeks. Scores for all assignments and exams are regularly updated on Blackboard. You are responsible for notifying the Instructor **within one (1) week** of a score posting if you think a score is missing or inaccurate. Moreover, you only have this period of time to contest a score on an assignment/exam. If you fail to inquire/notify us of any discrepancy, missing score, or contest a score within one week of the date the score is posted, no further changes will be made.

Assignment Submission Policy

Assignments are due by 5PM on Sunday prior to class unless prior arrangements are made. These should be sent to me by email with the file that is named with your last name and the assignment date (and MH indicator number as relevant).

This is a list of Assignments and points but please also check out the list below of classes and what we'll discuss each session.

MH# (Meta HW), Meeting Requirements (MR), and Reading Assignments (RA)

Points are value (e.g., there are 20 total MR homework points representing 20% of your grade; there are twelve MH so "wiggle room" in case of absence.

More detailed descriptions of MR assignments will be on blackboard

#	Due	Nature of Assignment (DUE TODAY BELOW)	Points
	Aug 22	<p>1. RA: BHHR Part 1 (chapters 1 (How a meta-analysis works), 2 (Why perform a meta-analysis), & 45(When does it make sense to perform a meta-analysis)): H2019 Parts 1 (Research Synthesis as a Scientific Process 2 (Formulating a problem – hypotheses/problems and statistical considerations)</p> <p>Jeong, S-H, Cho, H, Hwang, Y (2012). Media Literacy Interventions: A Meta-Analytic Review, <i>Journal of Communication</i>, 62(3), 454–472, https://doi.org/10.1111/j.1460-2466.2012.01643.x</p> <p>Tukachinsky, R., Walter, N, & Saucier, C. J. (2020). Antecedents and effects of parasocial relationships: A Meta-Analysis, <i>Journal of Communication</i>, 70(6), 868-894, https://doi.org/10.1093/joc/jqaa034</p> <p>Van der Pas, D. J., & Aaldering, L., (2020). Gender differences in political media coverage: A Meta-Analysis, <i>Journal of Communication</i>, 70(1), 114–143, https://doi.org/10.1093/joc/jqz046</p> <p>2. MR: Arrange in class for 26th with Prof. Miller to discuss possible topic for Your Meta-analysis. (9-3PM one hour)</p>	
1	Aug 29	<p>1. MH1 Preliminary Search for Focus and Goals (pp slides for class + Identifying existing review/meta-analyses in domain) prepare answers to questions (see detail) for your project. Separately, provide 1 question for each guest (and their paper below).</p> <p>2. RA: BHHR Part 145; H2019 Parts 1 and 2 (note readings same as first week)</p> <p>Meta-analysis Examples <u>Guest speakers today</u></p> <p>Kim, H. M., & Miller, L. C. (2020). Are insecure attachment styles related to risky sexual behavior? A meta-analysis. <i>Health Psychology</i>, 39(1), 46-57. doi:https://doi.org/10.1037/hea0000821</p> <p>Walter, N., Tukachinsky, R., Pelled, A., & Nabi, R. (2019). Meta-Analysis of Anger and Persuasion: An Empirical Integration of Four Models, <i>Journal of Communication</i>, (69, 1) 73–93, https://doi.org/10.1093/joc/jqy054</p>	2
	Sept 5	Labor Day- No Class	
2	Sept 12	<p>1. MH2: Specify Meta Review Formulating the Problem (see detailed description; includes PP slides for class); Review most relevant/recent meta-analysis (or if not available systematic review; What did they do and find? What will you add? What's the audience/outlet for this?)</p> <p>2. Searching the Literature: H2019 Chapters 4-6; Additional readings as assigned</p>	2

3	Sept 19	1.MH3: Provide 5 original research articles that you might use for your meta-analysis. PPs to explain how they provide data needed (and what's different from other meta-analyses) in his domain regarding how you will approach your questions/ hypotheses) 2. H2019 Chapters 4-6; 8-9; Additional readings as assigned	2
4	Sept 26	1.MH4: Using PRISMA2020 (and meta-analysis reviews in journals to publish in) as a guide create a template for title, abstract, introduction and methods of your review. Fill in what you know and where you are for items 5-15). Prepare as PP slides for class. 2.RA: H2019 Chapters 7-10; Additional readings as assigned	2
5	Oct	1.MH5: Collect 10 studies in specified focus area suitable for planned meta-analysis. Provide all abstracts with references; Start preparing Pre-Registration PROSPERO and/or other. Be prepared to discuss in class; PP slides. Identify and prepare correspondence to potentially relevant authors of articles. 2.RA: H2019 Chapters 7-10; BHR part 2 (chapters 3-9). Additional readings as assigned	2
6	Oct 10	1.MH6: Discuss coding scheme and potential moderators; Study Coding scheme including quality guide choices justified; plan for evaluating coding decisions 2.RA: H2019 Chapters 7-10; BHR Ch3-9 and 49; Additional readings as assigned	2
7	Oct 17	1.MH7: Collect all or at least 15 studies; Code studies and compute Effect sizes (distribution of). Be prepared to present pp presentation of this. 2.RA: BHR CMA Ch10-14; BHR 46, 50	2
8	Oct 24	1.MH8 Initial draft of Method section due 2.RA BHR CMA 15-23, 35	2
9	Oct 31	1. MH9: Heterogeneity conducted on your studies Pp presentation prepared due; Initial Draft of Outline for Introduction and Results due 2:RA: BHR CMA 35, Part 7 (27-31 especially as relevant)	2
10	Nov 7	1.MH10: Revised Method and Results 2.RA: Meta-analyses Conducted as Templates	2
11	Nov 14	1. MH11: Review paper results draft due 2.RA: Meta-Analysis Conducted as Templates Articles/Chapters on "What not to do" and "What to do"	2
12	Nov 21	MH12: Revised Draft (Title, Abstract, Introduction, Methods, Results with discussion, Appendices, PRISM and Flow) Due No Class this week MR: Arrange Individual Meetings going over your Meta-Analysis with Professor Miller	2
13	Nov28	Oral Report on Meta-Analysis	20%

MF	Final Exam	Final Draft of Meta-Analysis Due	50%
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Course Notes

We'll be using comprehensive meta-analysis software that will be freely available to students (individually or shared. I've arranged copies for you so please don't buy a copy of this. Your texts are available through amazon and your readings are available on blackboard and also through USC's library access or through the International Communication Association website for ICA journals. If you have a Mac computer you will need to arrange software for an interface for this software (like parallels). Lecture slides and materials will be on blackboard.

Policies and procedures. *This course is focused on helping you – from “soup to nuts” develop a potentially publishable meta-analysis in an area of your choice in health communication, broadly defined. My teaching philosophy is that students learn best by doing, by listening from role models (e.g., former students now assistant professors who have taken this class and have published their meta-analyses).*

To create an inclusive and accessible classroom students present their emerging ideas for their meta-analyses almost every week and respond to their colleagues' emerging ideas and meta-analytic components. For your meta-analyses you are encouraged to consider diversity in choosing moderators, variables, audiences (and many meta-analyses do so as you shall see). Students are expected to respectfully provide critiques and comments that can guide their colleagues in improving their meta-analytic work. This feedback and class discussion is highly valued and is incorporated into the class discussion component of your grade.

Students are expected to attend each class and appointment. If you need to miss a class for illness or an emergency, please contact me and let me know. Please reach out to colleagues in the class for notes (and check blackboard). If you have any questions about class presentations, work, or assignments, please contact me by email and discuss. You are expected to check your USC email regularly especially the day before class or the day of class. Usually, I respond to emails within 24 hours. Homework is to be turned in on Sunday by 5PM so I can give you better feedback in class.

Communication

Please feel free to contact me outside of class and if you would like to set up an appointment on zoom or in my office to discuss your project or anything else that is on your mind. Email is my preferred mode of contact and I am usually responsive within 24 hours (usually much less).

Proficiencies

You should have some background in quantitative methods but this need only be fairly basic (e.g., correlations, mean differences).

Notes on Health Communication coverage

Health Communication takes place at every level of analysis (i.e., individual, interpersonal, group/network, organizational, mass/ societal). Communicating about health can involve research online and via emerging technologies. Health communication is a broad, growing, and exciting field with exceptional career opportunities (e.g., for academic positions in health communication and procuring large federal grants; for a visible national/international presence and impact beyond, as well as within the field of communication). Many of our faculty at USC's Annenberg School for Communication conduct research in and have had/and have federal and other grants including in or related to health communication.

For this class I've selected mostly very recent meta-analyses published in top journals that cover a ***range of reviews in the field of health communication pertaining to:***

1. theoretical variables that are often examined as predictors of various health outcomes
2. persuasive message effects on attitudes, intentions, and behavior
3. intervention effects on mental and physical health outcomes
4. *interpersonal factors and their relationship to and effects on health outcomes*
5. *Diversity (and Discrimination) and health outcomes*

These meta-analyses provide not only summaries of major areas of current research engagement in the field but also templates for publishing meta-analyses in communication and psychology in the health area. A large percentage of students who have taken this class have gone on to publish their meta-analyses.

Syllabus by Date and Content (for text assignments and MR homeworks see companion assignment list)

Important note to students: *Be advised that this syllabus is subject to change - and probably will change - based on the progress of the class, news events, and/or guest speaker availability.*

<i>Classes</i>	<i>Content</i>	<i>Add'n Content Reading</i>
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August 22nd Introduction to Meta-Analysis: Background and Overview (see assignments)

How does a meta-analysis work (Overview)? Why should we perform a meta-analysis; When does it make sense to perform a meta-analysis? Today we'll briefly discuss research synthesis as a scientific process and how to begin thinking about formulating your meta-analysis problem (that is your hypotheses and questions/problems and the statistical and other considerations in making your initial choices). Three meta-analyses published in the Journal of Communication provide examples of what target meta-analyses in Communication "look like" regardless of whether they are in health communication or not. We'll also discuss how to make decisions about what meta-analyses to consider within the field of health communication based on your interests, where you want to establish credibility and an understanding of larger patterns of effects (and what's missing) in important areas of health communication, and so forth.

Note: By September 12^h identify a potential "health area of focus" that you will investigate more deeply during the semester. [Arrange time in class today \(1 hour on](#)

August 26th from 9-3PM) to meet with Prof. Miller to work out your focus for the semester before class on September 12th.

Readings Read by Today: BHR Part 1 (chapters 1 (How a meta-analysis works), 2 (Why perform a meta-analysis), & 45(When does it make sense to perform a meta-analysis)): H2019 Parts 1 (Research Synthesis as a Scientific Process and 2 (Formulating a problem – hypotheses/problems and statistical considerations)

Jeong, S-H, Cho, H, Hwang, Y (2012). Media Literacy Interventions: A Meta-Analytic Review, *Journal of Communication*, 62(3), 454–472, <https://doi.org/10.1111/j.1460-2466.2012.01643.x>

Tukachinsky, R., Walter, N, & Saucier, C. J. (2020). Antecedents and effects of parasocial relationships: A Meta-Analysis, *Journal of Communication*, 70(6), 868-894, <https://doi.org/10.1093/joc/jqaa034>

Van der Pas, D. J., & Aaldering, L., (2020). Gender differences in political media coverage: A Meta-Analysis, *Journal of Communication*, 70(1), 114–143, <https://doi.org/10.1093/joc/jqz046>

August 29th Searching for Focus

A deeper dive with two guests who took this class and are now Assistant Professors in Communication who have published at least 1 meta-analysis → Why should we perform a meta-analysis? When does it make sense to perform a meta-analysis? Today we'll focus on beginning steps...how to begin thinking about formulating your meta-analysis problem (that is your hypotheses and questions/problems and the statistical and other considerations in making your initial choices).

- Part of today's class involves student power point presentations regarding your possible topics, research questions and hypotheses (from the assignment)
- Part of today's class involves two guests and their experience and insights (Prof. Nathan Walter (Northwestern U.) and Prof. Hye-Min Kim (U. of Massachusetts)- as Ph.D. students they took this class and published meta-analyses. As assigned you should have closely read these two articles below and done the homework as assigned for preparation for them.

Kim, H. M., & Miller, L. C. (2020). Are insecure attachment styles related to risky sexual behavior? A meta-analysis. *Health Psychology*, 39(1), 46-57. doi:<https://doi.org/10.1037/hea0000821>

Walter, N., Tukachinsky, R., Pelled, A., & Nabi, R. (2019). Meta-Analysis of Anger and Persuasion: An Empirical Integration of Four Models, *Journal of Communication*, (69, 1) 73–93, <https://doi.org/10.1093/joc/jqy054>

1. How did you choose your topic and research questions/hypotheses initially?
2. What did you have to consider in this process – that you anticipated and didn't? How did this process modify your questions/hypotheses (if it did so)?
3. Did your experience working on your meta-analysis give you insights regarding “lessons learned” in choosing topics, questions/hypotheses for next meta-analysis?

September 5 Labor Day No Class

September 12 Developing your Research Questions and Hypotheses (see assignments) and Planning the Literature Search

Part of class today involves student presentations with feedback regarding steps in deciding what meta-analysis each student will consider pursuing for their project this semester.

Part of class is on Searching the Literature in (1) a preliminary way as part of developing your research questions and focus and (2) in a more systematic way once you have more focus in preparation for next week's assignment. Additional readings below we'll discuss provide more templates and examples for a deeper look at what researchers' questions can be and how meta-analysis is conducted in communication and social science. Sometimes the focus of a meta-analysis is on theories and theoretical variables relevant to health outcomes. That is, variable x

should predict health outcome y. Researchers also ask at this point is this effect moderated by some additional variable (see the Hagger et al. piece for example for a theoretical moderator examined in enough existing research in this area to test this moderator – perceived behavioral control—as a moderator)

Additional Readings: Variables and Moderators Predicting Health Outcomes

Baird, H. M., Webb, T. L., Sirois, F. M., & Gibson-Miller, J. (2021). Understanding the effects of time perspective: A meta-analysis testing a self-regulatory framework. *Psychological Bulletin*, 147(3), 233-267. doi:

<https://doi.org/10.1037/bul0000313>

Hagger, M. S., Cheung, M. W., Ajzen, I., & Hamilton, K. (2022). Perceived behavioral control moderating effects in the theory of planned behavior: A meta-analysis. *Health Psychology*, 41(2), 155-167. doi:

<https://doi.org/10.1037/hea0001153>

Kuang, K., Wilson, S. R. (2017). A Meta-Analysis of Uncertainty and Information Management in Illness Contexts, *Journal of Communication*, 67(3), 378–401, <https://doi.org/10.1111/jcom.12299>

Yang, Q., Millette, D., Zhou, C., Beatty, M., Carcioppolo, N., & Wilson, G. (2020). The effectiveness of interactivity in improving mediating variables, behaviors, and outcomes of web-based health interventions: A meta-analytic review. *Health Communication*, 35(11), 1334-1348.

doi:<https://doi.org/10.1080/10410236.2019.1631992>

September 19 *Conducting your literature search for your meta-analysis (see assignments; re-review H2019 chapters 1-3 and chapters 8-9)*

Part of today's class involves each student sharing 5 research articles you might use for your meta-analysis, describing what variables each article might afford in your powerpoint presentation to the class. This assignment requires you to look for things in each article that involves not only variables that you might code given your questions and hypotheses but potential moderators of interest given this focus and what data is available in the article (or what data could be available from the author or through some other means per article).

Part of class today involves a discussion of PRISMA2020 (the coding form used increasingly in health and medical journals and that informs the steps you need to take for publishable meta-analyses). This discussion prepares you for next week's assignment involving PRISMA.

Part of class today involves discussing a set of meta-analyses that look at persuasive effects related to health communication. In some meta-analyses we are examining experimental effects (and we can see how they do that in this domain where enough primary research articles involve experimental studies).

Additional readings:

Persuasive Message Effects: What Factors Affect Attitudes, Intentions, and Behavior

Bigsby, E., & Albarracín, D., (2022). Self- and Response Efficacy Information in Fear Appeals: A Meta-Analysis, *Journal of Communication*, 72 (2), 241–263, <https://doi.org/10.1093/joc/jqab048>

Oschatz, C., Marker, C. (2020). Long-term Persuasive Effects in Narrative Communication Research: A Meta-Analysis, *Journal of Communication* (70, 4) 473–496, <https://doi.org/10.1093/joc/jqaa017>

Walter, N., Tukachinsky, R., Pelled, A., & Nabi, R. (2019). Meta-Analysis of Anger and Persuasion: An Empirical Integration of Four Models, *Journal of Communication*, (69, 1) 73–93, <https://doi.org/10.1093/joc/jqy054> (already discussed earlier)

Walter, N., Brooks, J. J., Saucier, C. J., & Suresh, S. (2021) Evaluating the Impact of Attempts to Correct Health Misinformation on Social Media: A Meta-Analysis, *Health Communication*, 36 (13), 1776-1784, DOI: [10.1080/10410236.2020.1794553](https://doi.org/10.1080/10410236.2020.1794553)

September 26 *Coding studies for your meta-analysis (see assignments)*

September 26 additional readings: Interventions Effects on Mental and Physical Health Outcomes

Parts of today's class will focus on

a. student presentations of their PRISMA charts assignment.

- b. *a more detailed discussion of Coding Primary Studies for your meta-analysis (and pre-registration considerations)*
- c. *more meta-analysis published templates we'll discuss (see additional readings for today). These are meta-analyses of interventions (randomized controlled trials) including technological components (e.g., mobile phones and just-in-time adaptive interventions);*
 - i. *possible guest speaker Liyuan Wang(former Ph.D. student who took this class and is now on a post-doc).*

Additional readings:

- Berry, M. P., Sala, M., Abber, S. R., & Forman, E. M. (2021). Incorporating automated digital interventions into coach-delivered weight loss treatment: A meta-analysis. *Health Psychology, 40*(8), 534-545. doi:<https://doi.org/10.1037/hea0001106>
- McCarrick, D., Prestwich, A., Prudenzi, A., & O'Connor, D. B. (2021). Health effects of psychological interventions for worry and rumination: A meta-analysis. *Health Psychology, 40*(9), 617-630. doi:<https://doi.org/10.1037/hea0000985>
- Orr, J. A., & King, R. J. (2015). Mobile phone SMS messages can enhance healthy behaviour: A meta-analysis of randomised controlled trials. *Health Psychology Review, 9*(4), 397-416. doi:<https://doi.org/10.1080/17437199.2015.1022847>
- Tran, U. S., Birnbaum, L., Burzler, M. A., Hegewisch, U. J. C., Ramazanova, D., & Voracek, M. (2022). Self-reported mindfulness accounts for the effects of mindfulness interventions and nonmindfulness controls on self-reported mental health: A preregistered systematic review and three-level meta-analysis of 146 randomized controlled trials. *Psychological Bulletin, 148*(1-2), 86-106. doi:<https://doi.org/10.1037/bul0000359>
- Wang, L., & Miller, L. C. (2019). Just-in-the-moment Adaptive Interventions (JITAI): A Meta-Analytic Review, *Health Communication, <https://doi.org/10.1080/10410236.2019.1652388>* .

October 3 Calculating Effect Sizes (see assignments)

Parts of today's class will focus on

- a. *student presentations of their PROSPERO registration and your 10 studies. Powerpoints of one of those articles' abstract and why the study is suitable for your meta-analysis. Correspondence need and how to do this as needed.*
- b. *Today we'll discuss taking a more detailed approach to Coding Primary Studies for your meta-analysis*
- c. *We'll discuss Comprehensive Meta-Analysis (CMA) and discussion of calculating effect sizes; Insuring you have the software you need for Comprehensive Meta Analysis (CMA) and to interface with CMA*
- d. *Be prepared to discuss more meta-analysis published templates (see additional readings for today). These are concerned with interpersonal factors and health putcomes*

- Jeong, M. & Bae, R. F. (2018) The Effect of Campaign-Generated Interpersonal Communication on Campaign-Targeted Health Outcomes: A Meta-Analysis, *Health Communication, 33*:8, 988-1003, DOI: [10.1080/10410236.2017.1331184](https://doi.org/10.1080/10410236.2017.1331184)
- Kim, H. M., & Miller, L. C. (2020). Are insecure attachment styles related to risky sexual behavior? A meta-analysis. *Health Psychology, 39*(1), 46-57. doi:<https://doi.org/10.1037/hea0000821> (discussed earlier)
- Regehr, C.; Glancy, D., Pitts, A.; LeBlanc, V. R. (2014). Interventions to Reduce the Consequences of Stress in Physicians: A Review and Meta-Analysis. *The Journal of Nervous and Mental Disease: 202*(5), 353-359 doi: [10.1097/NMD.0000000000000130](https://doi.org/10.1097/NMD.0000000000000130)
- Riva Tukachinsky, R., Walter, N., & Saucier, C. (2020). Antecedents and Effects of Parasocial Relationships: A Meta-Analysis, *Journal of Communication, 70*(6), 868-894, <https://doi.org/10.1093/joc/jqaa034>
- Uchino, B. N., Trettervik, R., Kent de Grey, Robert G., Cronan, S., Hogan, J., & Baucom, B. R. W. (2018). Social support, social integration, and inflammatory cytokines: A meta-analysis. *Health Psychology, 37*(5), 462-471. doi:<https://doi.org/10.1037/hea0000594>

October 10 Describing Effect Size Distributions (see assignments) and workshop on Comprehensive Meta-Analysis (a little on fixed and random effects)

Parts of today's class will focus on

- a. *student presentations of their Coding scheme and potential moderators and quality guide choices and plan for evaluating coding (check on pre-registration)*
- b. *students should have variables for 5-10 studies for their primary question to calculate effect sizes and distributions in CMA workshop today.*
- c. *students should be prepared to discuss potential moderators in their studies and whether they have the data they need in the article or will need to inquire from authors.*
- d. *Workshop on Comprehensive Meta Analysis including with your data*
- e. *Additional meta-analysis readings discussed:*

Diversity (and Discrimination) and Health A range of variables (including gender, race, ethnicity, social/cultural group, etc. Individual difference variables) may be used as moderators. In addition to moderator considerations the focus of a meta-analysis has often been on a particular audience (e.g., African American Women, Men who have sex with men) sometimes due to their higher risk for given diseases. Another consideration here are interventions that are designed to be culturally sensitive and tests (via meta-analysis) of whether those interventions are effective for whom, when, how. Another consideration is how variables (e.g., discrimination or stigma) may predict health outcomes.

Ballard, A. M., Davis, A., & Hoffner, C. A. (2021) The Impact of Health Narratives on Persuasion in African American Women: A Systematic Review and Meta-Analysis, *Health Communication*, 36(5), 560-571, DOI: [10.1080/10410236.2020.1731936](https://doi.org/10.1080/10410236.2020.1731936)

Hodge, D. R., Jackson, K. F., & Vaughn, M. G. (2010). Culturally sensitive interventions and health and behavioral health youth outcomes: A meta-analytic review. *Social Work in Health Care*, 49(5), 401-423. doi:<https://doi.org/10.1080/00981381003648398>

Pachankis, J. E., Mahon, C. P., Jackson, S. D., Fetzner, B. K., & Bränström, R. (2020). Sexual orientation concealment and mental health: A conceptual and meta-analytic review. *Psychological Bulletin*, 146(10), 831-871. doi:<https://doi.org/10.1037/bul0000271>

Pascoe, E. A., Lattanner, M. R., & Richman, L. S. (2022). Meta-analysis of interpersonal discrimination and health-related behaviors. *Health Psychology*, 41(5), 319-331. doi:<https://doi.org/10.1037/hea0001147>

Sheridan, S. M., Smith, T. E., Kim, E. M., Beretvas, S. N., & Park, S. (2019). A meta-analysis of family-school interventions and children's social-emotional functioning: Moderators and components of efficacy. *Review of Educational Research*, 89(2), 296-332. doi:<https://doi.org/10.3102/0034654318825437>

October 17 Examining Fixed/Random Effects; Moderators (see assignments)

Parts of today's class will focus on

- a. *student presentations of their distributions of effect sizes and specified moderators they will test for their effects.*
- b. *students should have variables for all or 15 studies and codes for main effect and at least one moderator that is coded in 10 or more of these.*
- c. *Workshop on Comprehensive Meta Analysis including with your data On moderators and fixed/random effects in more detail*

October 24 Homogeneity of Variance, Meta-regression, and Publication Bias

Parts of today's class will focus on

- a. *student presentations of their CMA results on moderators.*
- b. *Workshop on Comprehensive Meta Analysis including with your data*

On homogeneity, publication bias and meta-regression (as possible)

- c. Additional discussion of complex data structures as relevant to individual projects
And illustration with data sets.

October 31 Writing Meta-Analytic Reports for Publication in Top Journals

Parts of today's class will focus on

- a. *student presentations of their CMA results for tests of homogeneity, publication bias and meta-regression as relevant.*
- b. *Focus today on writing up meta-analytic reports and using templates based on other meta-analyses for the journals in which you wish to publish.*

November 7 Evaluating a Meta-Analysis

- a. *Today we will focus on past (and other) meta-analyses and Review them with a keen eye to what you've learned and what they (and You in your review should do)*

November 14 Additional Topics *(this is based on what meta-analyses students are doing and what advanced topics may be useful, suggestions welcome)*

November 21 No Formal Class this week

Schedule a one-on-one tutorial -arrange 1 hour meeting with Prof. Miller to go over your current version of your abstract, intro, method, results and discussion (give me a day to review prior to our meeting to provide extensive feedback for you).

November 28

Oral Reports

Dec 2 Final exam

Final Paper Due

Statement on Academic Conduct and Support Systems

a. Academic Conduct

Plagiarism

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in [SCampus](#) in Part B, Section 11, "[Behavior Violating University Standards](#)." Other forms of academic dishonesty are equally unacceptable. See additional information in [SCampus](#) and university policies on scientific misconduct, policy.usc.edu/scientific-misconduct.

The School of Communication maintains a commitment to the highest standards of ethical conduct and academic excellence. Any student found responsible for plagiarism, fabrication, cheating on examinations, or purchasing papers or other assignments will be reported to the Office of Student Judicial Affairs and Community Standards and may be dismissed from the School of Communication. There are no exceptions to the school's policy.

In addition, it is assumed that the work you submit for this course is work you have produced entirely by yourself, and has not been previously produced by you for submission in another course, without approval of the instructor.

b. Support Systems

Counseling and Mental Health - (213) 740-9355 – 24/7 on call
studenthealth.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call

suicidepreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention and Services (RSVP) - (213) 740-9355(WELL), press "0" after hours – 24/7 on call

studenthealth.usc.edu/sexual-assault

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED)- (213) 740-5086 | Title IX – (213) 821-8298

equity.usc.edu, titleix.usc.edu

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following *protected characteristics*: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations. The university also prohibits sexual assault, non-consensual sexual contact, sexual misconduct, intimate partner violence, stalking, malicious dissuasion, retaliation, and violation of interim measures.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298

usc-advocate.symplicity.com/care_report

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity | Title IX for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services - (213) 740-0776

osas.usc.edu

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Support and Advocacy - (213) 821-4710

uscsa.usc.edu

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC - (213) 740-2101

diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call

dps.usc.edu

Non-emergency assistance or information.

Annenberg Student Success Fund

<https://annenberg.usc.edu/current-students/resources/annenberg-scholarships-and-awards>

The Annenberg Student Success Fund is a donor-funded financial aid account available to USC Annenberg undergraduate and graduate students for non-tuition expenses related to extra- and co-curricular programs and opportunities.

Add/Drop Dates for Session 001 (15 weeks: 8/22/22 – 12/2/22)

Link: <https://classes.usc.edu/term-20223/calendar/>

Friday, September 9: Last day to register and add classes for Session 001

Friday, September 9: Last day to drop a class without a mark of “W,” except for Monday-only classes, and receive a refund for Session 001

Friday, September 9: Last day to change enrollment option to audit for Session 001

Friday, September 9: Last day to change a Pass/No Pass to a letter grade for Session 001

Friday, September 9: Last day to purchase or waive tuition refund insurance for fall

Tuesday, September 13: Last day to add or drop a Monday-only class without a mark of “W” and receive a refund or change to Pass/No Pass or Audit for Session 001

Friday, October 7: Last day to drop a course without a mark of “W” on the transcript for Session 001. Mark of “W” will still appear on student record and STARS report and tuition charges still apply. [Please drop any course by the end of week three (or the 20 percent mark of the session) to avoid tuition charges.]

Friday, November 11: Last day to drop a class with a mark of “W” for Session 001