

Topics in Abn. & Clin. Psych. (Hypnosis) 830:452 Dr. R. Karlin, Fall, 2010
Senior seminar with major writing project requirement - Psychology majors only

Students should have taken Quantitative Methods, Abnormal, Social and a research methods course. Preferably they will also have taken at least one course in perception, cognition or neuroanatomy. Knowledge at an introductory level of these areas will be assumed.

Hypnosis

Modern conceptions of hypnosis can be traced directly to the work of Franz Anton Mesmer, a Viennese physician working in Paris just prior to the French Revolution. Within 30 years of Mesmer's work, most of the basic hypnotic phenomena from amnesia to pain control to hallucinations had been reported (see Ellenberger 1970). James Braid, a Scottish surgeon, coined the term hypnosis in the 1840s. Nowadays, hypnosis refers to the acceptance of a social role, usually involving deep relaxation, and engagement in fantasy. During hypnosis a lowering of critical judgment permits a wide range of behavioral, cognitive, and affective responses to suggestion (see, for example, Orne 1970).

During the last two hundred years, a variety of exaggerated and mistaken claims have been made for hypnosis. Claims have ranged from enhanced psychic abilities to past life regression to revived memories of very early childhood incest and alien abduction. In the past, such claims have resulted in periods of scientific disrepute for hypnosis. Nevertheless, during this century fine scientists (e.g., Hull, Hilgard, Orne, Barber, Sarbin and their students) and eminent clinicians (e.g., Erickson, Fromm, H. Spiegel) have been drawn to study hypnosis (see Sheehan & Perry 1976). As well as elucidating the domain of hypnosis, their careful investigations have increased understanding of the potential pitfalls that appear in experimentation with human research participants (see Orne 1959, 1970).

An observer, watching a demonstration of hypnosis with a highly hypnotizable research participant, sees a series of simple verbal suggestions that result in relatively spectacular alterations of behavior, thought, emotion, and perception. Asked to re-experience the distant past s/he seems to become childlike, entirely captured by the delusion that it is many years earlier. Asked to hallucinate the absence of an obstacle between where the participant sits and some other place, the highly hypnotizable participant claims to see nothing in the intervening space. But when asked to walk to that place (and thus, through the obstacle whose absence is being hallucinated), the participant walks around the obstacle without seeming to notice doing so. Asked to look back and see that there is nothing there, there is easy agreement with no seeming sense that walking around the obstacle has just contradicted this statement. Asked to forget all that has happened until a pencil is tapped twice, the participant will later "awaken" with amnesia that is (almost always) temporary and reversible.

Thus, in response to brief verbal suggestions, the highly hypnotizable individual seems to see, hear, feel, smell, and taste in apparent contradiction to the stimuli actually present (see Orne & Hammer 1974). Memory, the sense of volition, mood, and even awareness of self may be altered. With appropriate suggestions, such effects may be extended into the posthypnotic period. Similar

experiences, suggested to those with less hypnotic ability, have far fewer effects but may still allow a sense of events, such as motor movement, to occur without the usual sense of volition.

How can we explain these effects?

Psychological science has spent a good deal of time and effort attempting to explain the effects of hypnosis in both laboratory and clinical settings. When a phenomenon is reasonably spectacular and is not easily explained (and attempts to "explain it away" have obvious limits) it tends to attract increasingly good researchers until a good deal of the phenomena have been explored and understood through concepts that fit with a broader range of psychological issues. By the 1990s, we had learned a good deal. As part of that search, hypnosis researchers had contributed to methodological issues such as the limits and ecological validity of experimentation in Psychology. Hypnosis is robust and it presents problems that are the right size to be studied carefully in research laboratories. Moreover, while hypnosis will fool you, the ways it fools us are instructive. They teach us a great deal about how people respond to psychological experimentation in general. These "artifacts," as much or more than the spectacular hypnotic phenomena they partially explain, are key to this class

Participation in hypnosis

The focus of the class will be the science, not the experience of hypnosis. However, there is no way to fully understand it without yourself experiencing some of it. Thus, this course has an experiential component and comes with an informed consent. We will be doing hypnosis with widely used hypnosis scales (the experience of which has been shown to be less stressful than a day of college classes). The scales suggest things like feeling a force moving your hands together and finding them moving together, seemingly by themselves. You might also be asked to find your arm too heavy to lift or to see two colors on a screen when three are really present. Response to these suggestions has no implications for your life or about you in any way. Further, none of the items has anything personal about it and all have been used with thousands of students in classroom settings without effects more serious than an occasional transient headache.¹ After going through the scales, we will discuss the experience of them, suggestion by suggestion. Please do your best to experience each of the suggestions fully, letting happen whatever is happening, even if it is not what you expect.

However, while I strongly encourage you to participate in these scales, it is a purely voluntary activity. Your participation or lack of participation will not effect your grade in any way. However, if you chose not to participate, please do not come to class on "hypnosis" days nor take part in nor observe the discussions of experience that follows.

You should also know that this course is not about teaching anyone how to hypnotize people. The use of hypnosis by those not professionally trained to use it in highly limited ways in highly limited settings is potentially harmful. This course involves critically

¹ On the other hand, anyone with a history of psychiatric hospitalization should discuss participating with Dr. Karlin.

examining an interesting and important research literature and reviewing part of it critically in a lengthy and important paper (that will be worth about 50% of your final grade).

How the course will run.

There will be a lot of reading from scholarly texts and journals. There is no textbook. (Anything I might have used as a text is out of print.) Articles are mostly available online at the course Sakai website or available in hard copy at the university library. Once you are at the course website, click on "Resources" and most of the required reading for the first part of the course will be immediately available (more will be added as we go along). As for your paper, you will have to find the sources for yourself. In general, your review of the literature may be restricted to books and journals available online and material available at the Sci-Med Library on Busch.

There will be two in-class essay exams, about 1 every 6 weeks. Each exam will assess your knowledge of and ability to think about the materials we cover: written, lecture and video. There will also be a couple of brief quizzes on statistical methods, discussed below. You will also be asked to participate in class. Each of these activities will contribute to the other 50% of your grade.

McGlashin, Evans & Orne, 1969: Your second assignment, due 9/14, involves reading a classic study from Martin Orne's lab at U. Penn. This is one of the toughest articles you will read all semester. However, it is critically important as it deals with many (though not all) of the key experimental design issues in hypnosis research. We will go over it, almost line by line, in class. Until you all understand the design issues we can not progress to more substantive issues about hypnosis. I hope that the process of going over McGlashin et al. will take no more three weeks, of which one week will be directly on the article.

The McGlashin article comes at the beginning of the class because it will prepare you to critically examine the literature we will go over during the rest of the class. One aspect of that preparation is to again become conversant with statistical methods routinely used in psychological research. There will be a week of films to enable you to review statistical methods before we go over them in class. Then we will spend a week going over statistical methods. You don't need to be able to do the calculations to compute an Anova or correlation from scratch. You do need to understand the basic concepts of null hypothesis testing using one or another statistical method. (Along with the brief quizzes, expect at least one of the essays on the first exam to ask you to discuss these concepts.) Most of you will not have studied repeated measures Anova. Again, the concepts, not the calculations are important.

No matter how well you did in Stat class, the odds are that most of you haven't given statistical analysis a passing glance since you took 830:200. So, we will go over correlation, regression, Anova and t tests in class. You have about two weeks to review the relevant chapters from a stat text. You can consult the text you used when you took

stat or you can download the key chapters from the new edition of my stat book from the website.

The quizzes and the exam will ask questions about correlation and regression such as "What does the null hypothesis say about the expected value of the correlation coefficient and what you can predict about Y when you know t_x ?" or "Why do the critical values of the correlation coefficient get closer to zero as degrees of freedom increase?" In regard to Anova and t testing you might be asked to explain the difference between a one way, two way and repeated measures Anova or what a t test can tell you that an F test can not.

As for the McGlashin article itself, take your time going over it, but don't bat your head against a wall. If you don't understand the details of the design or the analysis, it is OK. That is why we will go over it in such detail in class. Or come to office hours and I will spend some time on troublesome issues in class.

Feedback and pacing: Some of the reading may be tough going. At the beginning of each week, we will take a written anonymous vote on how fast we are going: too slow, too fast, or just about right. If one third or more of the class thinks we are going too fast, we will slow down. If we are to slow down, we will take another vote about whether to go on with the most recent assignment more slowly or go back over earlier work. Again, if more than 1/3 of the class wants to go back, we will do so. I would much rather slow things down and cover a topic or two less than have a significant number of students be overwhelmed by the material!

Final Grades: The course is graded A, B+, B, C, D and F. It is graded as a graduate course would be, with C, essentially, representing a failing grade. There will be about 25 students in this class. I would be very happy to be able to give 20 As, 5 B+ grades. Of course, I am willing to give 9 Bs and 16 grades of C or lower. Grades will reflect your performance on quizzes, exams, in class and on your major paper. Again, participating or not participating in the group hypnotic inductions and discussion of that experience will have no impact on your grade.

TENTATIVE SCHEDULE TO 10/14

<u>Date</u>	<u>Lecture and assignment</u>
9/2	First class Sakai and intro to hypnosis and hypnosis research Assigned: Get to Sakai course website OrneWhitehouse encyclopedia entry re hypnosis Banyai and Hilgard
9/7	Activity: Discuss the basic issues hypnosis researchers have been trying to solve and the differences and similarities between clinical and experimental hypnosis. Assigned: Statistical review: null hypothesis testing with correlation, regression, single factor Anova, repeated measures Anova, factorial Anova and simple comparisons with t tests.
9/9	No Class

9/14	Activity:	Watch Barnes BBC film. (Probably meet in audio-visual center in the basement of the Livingston Library). Brief discussion.
9/16	Activity:	Watch Barnes BBC film. Brief discussion.
9/21	Activity:	Review Correlation, null hypothesis testing and regression Brief quiz on underlying concepts.
9/23	Activity:	The Harvard Group Scale (HGS). Start to discuss responses
9/28	Activity:	Further discussion of experiences during Harvard Group Scale (Come to class only if you participated on 9/23)
	Assigned:	Complete statistics review, start on McGlashin et al. (1969)
9/30	Activity:	Anova and t testing review Brief quiz on underlying concepts
	Assigned:	Become really familiar with McGlashin et al. (1969) What did they do and what did the find?
10/5	Activity:	Detailed discussion of McGlashin paper: What did they do and what did the find?
	Assigned:	Start on readings on the history of hypnosis: Spanos history chapter, Gravitz, Ellenberger, Original (from 1784) Report (1 & 2) of the Commissioners (B. Franklin, Chair)
10/7	Activity:	Detailed discussion of McGlashin paper continued 1. What did they do and what did they find? 2. Is there evidence of bias in the data analysis and interpretation of findings?
	Assigned:	Complete reading of historical material
10/12	Activity:	Discussion of historical material and Barnes films
	Assigned:	Review material covered for exam
10/14	Activity:	Exam 1. Material covered: History of hyp., Barnes films, McGlashin, statistics & class lectures/discussion.
	Assigned:	Read Orne: Hypnosis, Artifact and essence paper and Nebraska Symposium (lengthy) paper