Finally, the responses to Question 29, which asked about the extent students believe the first day of class is important in setting the tone for the rest of the semester, appeared consistent with the forced-choice data (Items 3 and 4). About 60% reported that the first day of class is very important (44.5%) or important (15.1%) in setting the tone for the class over the course. This finding is supported by several written qualifications to this question, which included statements regarding how students changed their minds about the class based on other factors besides the first day of class (e.g., "It is somewhat important … things change throughout the semester," "Fairly important, however the tone can be changed throughout the course").

Our data do not imply that students know or understand what is most advantageous for them with regard to structuring the first day. More research is needed to examine effective first-day activities that will likely produce the most successful student learning outcomes, perhaps by comparing first-day practices across different psychology courses. Nonetheless, we recommend that on the first day of class instructors clearly state their expectations of the students by focusing on the course structure and requirements. Teachers should consider using the first day of class to review key policies and procedures, such as attendance, contact information, and course content, rather than to share personal information, engage in ice-breaker activities, or intimidate their students (see also Forsyth, 2003). In addition, teachers need not worry about having a bad first day—students appear cognizant that factors beyond the first day influence their impressions of the teacher and the class as the academic term progresses.

## References


Curzan, A., & Damour, L. (2000). *First day to final grade: A graduate student's guide to teaching.* Ann Arbor: University of Michigan Press.

Davis, B. G. (1993). *Tools for teaching.* San Francisco: Jossey-Bass.

Forsyth, D. R. (2003). *The professor's guide to teaching: Psychological principles and practices.* Washington, DC: American Psychological Association.

Lucas, S. G. (2006). The first day of class and the rest of the semester. In W. Buskist & S. F. Davis (Eds.), *Handbook of the teaching of psychology* (pp. 41–45). Malden, MA: Blackwell.

McKeachie, W. J. (2002). *McKeachie's teaching tips: Strategies, research, and theory for college and university teachers* (11th ed.). Boston: Houghton-Mifflin.

Perlman, B., & McCann, L. I. (1999). Student perspectives on the first day of class. *Teaching of Psychology, 26,* 277–279.


## Notes

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# Evaluating Popular Portrayals of Memory in Film


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*This article describes an activity designed to encourage students' critical thinking skills as they evaluate popular portrayals of memory phenomena in feature films. The activity is adaptable for any course with an extensive treatment of human memory such as cognitive psychology or learning and memory.*


A fundamental goal of many psychology courses is to provide students with the tools necessary to become critical consumers of psychology. As critical consumers, students are able to assess the logic, reasoning, methodology, and implications of psychological claims presented both in traditional research formats (e.g., refereed journals) and in the popular media. Of particular importance, they are able to compare and contrast popular depictions of psychological concepts with empirical findings. In this article, we describe an activity designed to encourage critical thinking skills as students evaluate popular portrayals of memory phenomena in feature films.

Many authors have documented the pedagogical value of feature films in psychology courses, using films to augment discussions of clinical psychology (e.g., Badura, 2002; Paddock, Terranova, & Giles, 2001; Rosenstock, 2003), developmental psychology (e.g., Cavanaugh, 1999; Whitbourne & Collins, 1999), social psychology (e.g., Boyatzis, 1994; Kirsh, 1998), and cognitive psychology (Conner, 1996). These authors and others (e.g., Dorris & Ducey, 1978; Fleming, Piedmont, & Hiam, 1990) have cited many benefits of using films in their courses, including increased student engagement, enhanced understanding of complex psychological issues, and improved critical evaluation skills.

Although this literature abounds with film suggestions for clinically oriented courses (e.g., personality, abnormal, counseling), suggestions for cognitively oriented courses (e.g., cognitive psychology, learning and memory) are relatively scant. This marked absence of relevant literature is rather surprising given the prevalence of film treatments of cognitive phenomena. For instance, a recent search of the American Film Institute (1999) *Catalog of Feature Films*, which documents every U.S. film from 1893 to 1970 (except 1951 to 1960), revealed that the topics of amnesia and memory loss were integral to nearly 300 films. The Internet Movie Database (2004) indicated that, since 1970, more than 40 U.S. films addressed these topics; 15 of these films have been produced since 2000. Clearly, a wealth of material exists that

could enhance comprehension, discussion, and critical evaluation of information in cognitive, learning, and memory courses.

We outline the procedures for a collaborative, feature film activity designed for any course with an extended treatment of human memory (for discussion of the benefits of collaborative learning and guidelines for the effective use of group projects, see Giordano & Hammer, 1999; Meyers, 1997). The activity serves as a capstone experience that requires students to apply the knowledge and skills that they gained throughout the course. Unlike many film activities, which require substantial class time to show and then discuss a movie, students complete the majority of work on this project outside of class; only two sessions are necessary for in-class presentations and discussion. Although used in classes of 40 students or less, instructors could adapt this activity for larger groups as well.

## Activity Materials and Procedure

Small groups of students (3 to 5 members) select a film from an instructor-approved list (e.g., see Table 1) and view the film as homework assignment. Typically, I place films on reserve in the library; more ambitious instructors, however, may coordinate the presentation of a "Memory Movie Week" with their local chapter of Psi Chi or Psychology Club. In addition to viewing the film, the groups need to search the memory literature for two relevant empirical articles (subject to instructor approval). For instance, students viewing the film *Memento* (Ryder & Nolan, 2000) might choose to read a case study of a person with anterograde amnesia (e.g., Wilson & Wearing, 1995) and an examination of pertinent coping and rehabilitation techniques (e.g., Andrewes & Gielewski, 1999). A group critiquing the film *The Majestic* (Behnke & Darabont, 2001) might select an investigation of retrograde amnesia stemming from head trauma (e.g., Ross, 2000) and an article reviewing amnesia assessment procedures (e.g., Mayes, 1995). I also direct students to read a variety of other primary and secondary sources placed on reserve (e.g., Erdelyi, 1993; Kihlstrom & Barnhardt, 1993; Neath & Surprenant, 2002; Schacter, 1996).

**Table 1. Brief List of Memory Feature Films**

| Topic/Title | Citation |
|---|---|
| Retrograde amnesia and memory suppression | |
| *Eternal Sunshine of the Spotless Mind* | Bushell, Williamson, & Gondry (2004) |
| *The Majestic* | Behnke & Darabont (2001) |
| *Regarding Henry* | Greenhut & Nichols (1991) |
| *Paris, Texas* | Sievernich & Wenders (1984) |
| *Mirage* | Keller & Dmytryk (1965) |
| *Shadow on the Wall* | Sisk & Jackson (1950) |
| *Random Harvest* | Franklin & LeRoy (1942) |
| Anterograde amnesia | |
| *50 First Dates* | Ewing, Lupi, Roach, & Segal (2004) |
| *Memento* | Ryder & Nolan (2000) |
| Hypnosis, memory loss, and recovery | |
| *The Curse of the Jade Scorpion* | Tenenbaum & Allen (2001) |
| *Dead Again* | Pollack & Branagh (1991) |
| *The Manchurian Candidate* | Koch & Frankenheimer (1962) |

Each group's objective is to prepare a written report (four to six pages) that critically compares the film's portrayal of memory with the empirical evidence gleaned from the articles, the textbook, and other course activities. When writing the paper, it is important for students to (a) describe the current state of knowledge in the literature (e.g., What are the common causes, symptoms, and treatments of retrograde amnesia? What methods have been used to study retrograde amnesia?), (b) provide a general synopsis of the film, (c) offer specific examples of how the film depicts memory, and (d) evaluate the aspects of the film that are consistent or inconsistent with empirical findings. In addition to the paper, each group is responsible for preparing a 15-min presentation of their findings for an in-class discussion. Students should provide important details from the journal articles as well as brief clips from the film to better illustrate their evaluation.

An interesting variation of the previous activity is a historical comparison of portrayals of memory in film and in the empirical literature. In this task, students view two films from different decades and compare their depictions of memory with one another and with the current literature. For example, a group interested in retrograde amnesia may contrast *Random Harvest* (Franklin & LeRoy, 1942) with *Regarding Henry* (Greenhut & Nichols, 1991). In addition to the guidelines suggested earlier, students' written reports should consider (a) whether film treatments of memory accurately reflected the research available at the time, and (b) whether these treatments grew more sophisticated or more accurate over time. If, indeed, the depictions are incongruent with one another or with research of the time, students need to consider the origins of such discrepancies. Although the historical variation is always an option each semester, typically most groups choose to complete the standard version of this activity.

## Evaluations and Conclusions

To assess whether this activity encouraged students to think critically, we adapted the critical thinking rubric designed by Washington State University (WSU, 2005) and evaluated the 11 written group reports from my last two cognitive psychology courses. The WSU rubric isolates seven characteristics of critical thinking and allowed us to assess whether the groups were able to (a) identify and summarize the main question at issue; (b) present their own hypothesis and perspective; (c) consider other salient perspectives and positions; (d) identify and assess the key assumptions that underlie the issue; (e) assess the quality of the supporting evidence; (f) consider the influence of context on this issue; and

(g) identify and assess the conclusion, implications, and consequences.

Each author independently evaluated each written report using a separate 5-point Likert-type scale ranging from 1 (*very weak*) to 3 (*average*) to 5 (*very strong*) for each of the seven characteristics. Following this task, we discussed the motivation behind each rating for each paper, and, in the event of an inconsistent rating, we continued the discussion until achieving consensus. Overall, on 88.31% of the ratings, we provided ratings that were either identical or within 1 rating point (50.64% identical); the remaining ratings differed by 2 points. Following discussion and consensus, the group projects received mean ratings for identifying the main question ($M = 4.18$, $SD = 0.60$), presenting their own hypothesis ($M = 4.00$, $SD = 0.63$), assessing the quality of supporting evidence ($M = 3.82$, $SD = 0.60$), identifying the conclusions and implications ($M = 4.00$, $SD = 0.54$), considering other positions ($M = 3.91$, $SD = 0.77$), identifying key underlying assumptions ($M = 3.00$, $SD = 0.30$), and considering the influence of context ($M = 3.91$, $SD = 0.30$). More important, each overall mean rating was average or above, which suggests that students engaged in all of the essential characteristics of critical thinking, although with varying degrees of mastery. Given the low rating of 3.00 for "identifying key underlying assumptions," these data also suggest that, in the future, we may need to alter the project's instructions so that students are asked to attend more to the context and underlying assumptions of their research.

In addition to evaluating the written reports, 19 students in the course rated various aspects of the activity on a 10-point Likert-type scale ranging from 1 (*extremely low*) to 10 (*extremely high*). Students reported that the exercise was an interesting ($M = 8.37$, $SD = 1.34$), effective ($M = 8.58$, $SD = 1.35$), and enjoyable ($M = 8.68$, $SD = 1.06$) learning experience that encouraged them to think critically about the course material ($M = 8.53$, $SD = 1.12$). Students also provided brief written evaluations of the project in which they addressed the positive and negative aspects of the assignment as well as whether future film activities should be collaborative or individual in nature.

The written student assessments of this activity were positive. For instance, one student remarked, "The best aspect of the project was being able to think critically about the material and apply it to something that interests most people (movies)." Another student stated, "I loved applying knowledge from our class to real world situations." Some students commented that they wished they had been able to see all of the movies before the discussion, but they realized that showing all of the films in class was not feasible. Of the 19 students surveyed, only 4 reported that they would prefer completing the assignment individually. The 15 students who favored the collaborative design suggested that working in groups enhanced their comprehension of the memory literature and aided in their evaluation of the film. In particular, one student commented, "I liked working with group members because they exposed me to ideas about the film that I was unaware of or had missed. Plus, it was an important experience to learn to work with others."

This activity affords students an opportunity to exercise their critical thinking skills with an enjoyable, yet challenging, task that is relevant to their everyday lives. The task itself requires little preparation on the part of the instructor and calls for relatively little class time. In its present form, the task is best suited for a smaller course (less than 40 students) with extensive coverage of human memory, such as cognitive psychology or learning and memory. However, with a few modifications to the format of the discussion and the paper, instructors could use this activity with larger classes as well.

## References


American Film Institute. (1999). *American Film Institute catalog: Feature films 1893–1970*. Retrieved March 6, 2006, from http://afi.chadwyck.com/home

Andrewes, D., & Gielewski, E. (1999). The work rehabilitation of a herpes simplex encephalitis patient with anterograde amnesia. *Neuropsychological Rehabilitation, 9,* 77–99.

Badura, A. S. (2002). Capturing students' attention: Movie clips set the stage for learning in abnormal psychology. *Teaching of Psychology, 29,* 58–60.

Behnke, J. (Producer), & Darabont, F. (Director). (2001). *The majestic* [Motion picture]. United States: Warner Bros.

Boyatzis, C. J. (1994). Using feature films to teach social development. *Teaching of Psychology, 21,* 99–101.

Bushell, D. L., Williamson, G. (Producers), & Gondry, M. (Director). (2004). *Eternal sunshine of the spotless mind* [Motion picture]. United States: Focus Features.

Cavanaugh, J. C. (1999). Integrating the humanities into a liberal arts course on adult development and aging. *Teaching of Psychology, 26,* 51–52.

Conner, D. B. (1996). From *Monty Python* to *Total Recall*: A feature film activity for the cognitive psychology course. *Teaching of Psychology, 23,* 33–35.

Dorris, W., & Ducey, R. (1978). Social psychology and sex roles in films. *Teaching of Psychology, 5,* 168–169.

Erdelyi, M. H. (1993). Repression: The mechanism and the defense. In D. M. Wegner & J. Pennebaker (Eds.), *Handbook of mental control* (pp. 126–148). Upper Saddle River, NJ: Prentice Hall.

Ewing, M., Lupi, D., Roach, J. (Producers), & Segal, P. (Director). (2004). *50 first dates* [Motion picture]. United States: Columbia.

Fleming, M. Z., Piedmont, R. L., & Hiam, C. M. (1990). Images of madness: Feature films in teaching psychology. *Teaching of Psychology, 17,* 185–187.

Franklin, S. (Producer), & LeRoy, M. (Director). (1942). *Random harvest* [Motion picture]. United States: Metro-Goldwyn-Meyer.

Giordano, P. J., & Hammer, E. Y. (1999). In-class collaborative learning: Practical suggestions from the teaching trenches. *Teaching of Psychology, 26,* 42–44.

Greenhut, R. (Producer), & Nichols, M. (Director). (1991). *Regarding Henry* [Motion picture]. United States: Paramount.

*Internet movie database.* (2004). Retrieved March 6, 2006, from http://us.imdb.com

Keller, H. (Producer), & Dmytryk, E. (Director). (1965). *Mirage* [Motion picture]. United States: Universal.
Kihlstrom, J. F., & Barnhardt, T. M. (1993). The self-regulation of memory: For better and for worse, with and without hypnosis. In D. M. Wegner & J. Pennebaker (Eds.), *Handbook of mental control* (pp. 88–125). Upper Saddle River, NJ: Prentice Hall.
Kirsh, S. J. (1998). Using animated films to teach social and personality development. *Teaching of Psychology, 25,* 49–51.
Koch, H. W. (Producer), & Frankenheimer, J. (1962). *The Manchurian candidate* [Motion picture]. United States: Metro-Goldwyn-Meyer.
Mayes, A. R. (1995). The assessment of memory disorders. In A. D. Baddeley, B. A. Wilson, & F. N. Watts (Eds.), *Handbook of memory disorders* (pp. 367–391). Oxford, England: Wiley.
Meyers, S. A. (1997). Increasing student participation and productivity in small-group activities for psychology classes. *Teaching of Psychology, 24,* 105–115.
Neath, I., & Surprenant, A. M. (2002). Memory, brain, and amnesia. In I. Neath & A. M. Surprenant (Eds.), *Human memory* (2nd ed., pp. 163–197). Belmont, CA: Wadsworth/Thomson Learning.
Paddock, J. R., Terranova, S., & Giles, L. (2001). SASB goes Hollywood: Teaching personality theories through movies. *Teaching of Psychology, 28,* 117–120.
Pollack, S. (Producer), & Branagh, K. (Director). (1991). *Dead again* [Motion picture]. United States: Paramount.
Rosenstock, J. (2003). Beyond *A Beautiful Mind*: Film choices for teaching schizophrenia. *Academic Psychiatry, 27,* 117–122.
Ross, S. M. (2000). Profound retrograde amnesia following mild head injury: Organic or functional? *Cortex, 36,* 521–537.
Ryder, A. (Producer), & Nolan, C. (Director). (2000). *Memento* [Motion picture]. United States: Newmarket.
Schacter, D. (1996). Vanishing traces: Amnesia and the brain. In D. Schacter, *Searching for memory: The brain, the mind, and the past* (pp. 134–160). New York: Basic.
Sievernich, C. (Producer), & Wenders, W. (Director). (1984). *Paris, Texas* [Motion picture]. United States: 20th Century Fox.
Sisk, R. (Producer), & Jackson, P. (Director). (1950). *Shadow on the wall* [Motion picture]. United States: Metro-Goldwyn-Meyer.
Tenenbaum, S. (Producer), & Allen, W. (Director). (2001). *The curse of the jade scorpion* [Motion picture]. United States: Dreamworks SKG.
Washington State University. (2005). *The critical thinking rubric.* Retrieved from Washington State University's Center for Teaching, Learning, and Technology site, http://wsuctproject.wsu.edu/ctr.htm
Whitbourne, S. K., & Collins, K. (1999). Employing interactive learning methods in a course on the psychology of aging. *Teaching of Psychology, 26,* 48–49.
Wilson, B. A., & Wearing, D. (1995). Prisoner of consciousness: A state of just awakening following herpes simplex encephalitis. In R. Campbell & M. A. Conway (Eds.), *Broken memories: Case studies in memory impairment* (pp. 14–30). Oxford, England: Blackwell.

## Note

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# Research Methods Courses and the Scientist and Practitioner Interests of Psychology Majors

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This study examined the effects that exposure to research methodology coursework has on students' interests in scientist and practitioner activities. Consistent with previous research, there was a positive correlation between scientific and practitioner interests. Exposure to instruction in research methods was associated with a loss of interest in scientific activities even for students who had strong interests in scientific occupations.

Interests in research among psychologists, psychology graduate students, and undergraduates is a much-discussed issue (Kimble, 1984; Mallinckrodt, Gelso, & Royalty, 1990; Stricker, 1997; Vittengl et al., 2004.) Leong and Zachar (1991) and Aspenson et al. (1993) demonstrated that interests in research and interests in practice are negatively correlated among graduate students. With undergraduate psychology majors, a somewhat different picture has appeared. Both Zachar and Leong (1992) and Leong, Conant, and Zachar (2004) found that among psychology majors, scientist and practitioner interests are positively correlated.

The differences between undergraduate and graduate students raise questions about the occupational interests of psychology majors. We suggest that undergraduate students enter the major with a positive bias toward psychologist activities, a bias that enhances the positive correlation between scientist and practitioner interests. Students presumably form more discriminating views of what does and does not interest them with increased exposure to the discipline.

In this study we examined the relation between exposure to a research methods class and scientist and practitioner interests. We have observed that many students enter psychology with a lay conception of psychologists as clinicians rather than as researchers and that their lay conceptions of science do not include detailed knowledge of research logic. Based on these observations, we hypothesized that students would lose interest in scientific activities after exposure to a class in research methods where such topics as operationalization and hypothesis testing are a main focus. We also hypothesized that psychology majors with strong interests in investigative occupations such as chemist and biologist would be less likely than other psychology majors to lose interest in research after exposure to a research methods class. Furthermore, we hypothesized that exposure to the content offered in a research methods class would have no effect on practitioner interests.