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Do Actors Possess Traits Associated With High Hypnotizability?

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Characteristics that help actors behave as if what they imagine is real are also factors shown to predict hypnotizability: imaginative suggestibility (Sheehan, McConkey, & Law, 1978), absorption (Silva, Bridges, & Metzger, 2005; Kirsch & Braffman, 2001), and fantasy proneness (Allen & Coyne, 1995; Kirsch & Braffman, 2001). In a small preliminary study, we investigated whether acting students score higher in skills and personality traits associated with hypnosis in comparison to students studying another art form (music) and students not studying the arts. Sixteen acting students, 13 music students, and 20 nonarts students completed the Creative Imagination Scale (CIS), the Tellegen Absorption Scale (TAS), and the Creative Experiences Questionnaire (CEQ). Acting students showed greater imaginative suggestibility (as measured by the CIS) and fantasy proneness (as measured by the CEQ), and absorption (as measured by the TAS) than did both music and nonarts students. Because these traits have been shown to be associated with hypnotizability, we suggest that acting students may be more hypnotizable than are nonacting students. Most importantly, these findings can help us understand how actors are able to convincingly "become" their character.

Keywords: absorption, acting, fantasy proneness, hypnotizability, suggestibility

When Meryl Streep played Margaret Thatcher in The Iron Lady, it was almost impossible to believe that the person on screen was Streep and not Thatcher, so convincingly did the actress portray the historical figure. What psychological characteristics enabled Streep to enter into the shoes of Thatcher and create the illusion of becoming this character?

The motivating question of our research is whether the actors' ability to imagine themselves as a character and adopt imagined situations as real is related to hypnotizability, as measured by imaginative suggestibility, absorption, and fantasy proneness. This seems plausible given that hypnosis entails the experience of specific suggestions as real. The goal of this study was to understand whether the capacities that might allow actors to convincingly "become" their character are seen more in actors than in nonactors.

Actors adopt fictional situations by using their imaginations to create a real life for the character that they must portray, including physical traits, personal histories, and psychological profiles not fully specified in the script (Moore, 1966). The imagination of the actor is critical for transforming the story in the script into a reality for both the actors and the audience. By delving into the given circumstances (the plot of the play, the setting, the conditions of the characters' lives, etc.), the actor becomes an active and immersed part of the world of the play rather than just an observer (Stanislavski, 1936/1948).

In most modern, Western styles, acting not only asks actors to develop the outward physical aspects of their character, but also to experience the inner life of a character to embody that character in a realistic manner (Verducci, 2000). Constantin Stanislavsky (1950), probably the most influential theater theorist and director for modern American acting, believed that this helps to avoid the appearance of false or exaggerated gestures. By means of a variety of exercises, actors learn to relive personal events similar to ones they are enacting, and to call up the emotions they actually experienced in order to enact these emotions in their character. Some actors are trained to conjure personal memories to create sensations and emotions relevant to the script. Stanislavski (1936/1948) encouraged

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actors to do so to the extent that these sensations and emotions were really experienced both by the actor and the audience.

We suggest, therefore, that acting bears much in common with hypnotizability and that acting exercises are often reminiscent of hypnotic inductions. Many acting exercises begin with a period of relaxation followed by remembering or imagining a personally experienced object, person, or event. For example, the actor may remember the feel, shape, texture, weight, and maybe even the smell of a tennis ball and then make real or imagined associations to it (e.g., happiness of playing tennis with a parent, embarrassment at losing, etc.). The actor then reappraises the conjured emotion to fit the circumstances of the character in the scene.

This procedure is not unlike the procedure of hypnosis, which consists of induction followed by suggestion (Nash & Barnier, 2008). Induction involves administering instructions for relaxation, followed by declarations that the individual is becoming hypnotized. The individual is then encouraged to experience specific suggestions, such as "You can make your hand and arm feel heavy" (Barber & Wilson, 1978). It is plausible to conjecture that, after this suggestion, hypnotized individuals conjure memories (consciously or unconsciously) of times when they have actually felt their hand and arm as heavy. Some people undergoing the hypnotic procedure describe alterations in their perception, voluntary action, and memory (Kihlstrom, 1985).

There is considerable debate about what a person under hypnosis experiences. The state theory of hypnosis claims that a hypnotized person can reach varying levels of a trance, so that each level is associated with variations in states of consciousness and brain functioning (Hilgard, 1965). State theorists believe that responses to hypnotic suggestions are the result of these altered states of consciousness and that hypnotized people develop an amnestic barrier while under hypnosis; the participant hypnotized to raise his arm is aware of raising his arm but remains unaware of why he is doing this (i.e., of what caused him to do this; Hilgard, Crawford, & Wert, 1979).

Theorists who reject the state theory of hypnosis argue that a person who is hypnotized is actively, rather than passively, engaged and that the responses to suggestions are merely a product of attitudes, expectancies, and motivation (Kirsch & Braffman, 2001). Additionally, nonstate theorists believe that people respond to suggestions almost as well without hypnosis as they do with hypnotic induction. Thus, they argue that suggestibility can be learned. Researchers of the nonstate theory of hypnosis claim that hypnotic responses are voluntary but are experienced as involuntary because the participants attribute their behavior to the hypnosis (Kirsch & Lynn, 1997).

Although we believe acting and hypnosis to have similar qualities, we do not wish to claim that they are identical. One way that they are different is in the source of the imagination; for example, the actor's imagination moves from an inward source (the actor's understanding of character and emotion regulation) to outward expression, whereas an individual undergoing hypnosis moves from an outward source (the hypnotist) to an inward experience. Furthermore, acting is a chosen profession whereby actors are paid for others to witness the expression of their imagination. On the other hand, an individual pays a hypnotist to help them explore private psychological phenomena. Nonetheless, a demonstration that actors possess traits or cognitive abilities related to hypnotizability (i.e., imaginative suggestibility, absorption, and fantasy proneness) can help us understand the seemingly mysterious ability of actors to convince us so powerfully that they have become their character.

Imaginative Suggestibility

Imaginative suggestibility refers to the ability to adopt an imagined situation as real. Actors may have high imaginative suggestibility because some types of training in acting include working with sense memory. Like hypnosis, these exercises also involve closing the eyes and imagining detailed sensations, such as drinking a cup of coffee (Gordon, 1998). The actor would then imagine the cup of coffee in his hand and would try to feel the texture, shape, and weight of the cup and the taste, temperature, and smell of the coffee. Then he could open his eyes and actually "see" the coffee cup in his hand, just as if it were real, and manipulate it as real. Actors are expected to be able to actually "see" anything on the stage (Moore, 1966). This is a skill that can be learned; acting students become more efficient at recalling specific memories and imagining them as real through the practice of drawing on their history, memories, and emotions (Hannah, Domino, Hanson, & Hannah, 1994).

Absorption

Absorption is a dispositional cognitive capability predictive of hypnotizability (Silva, Bridges, & Metzger, 2005; Jamieson, 2005). Absorption suggests a state of focus entirely dedicated to experiencing the attentional object, whether it is a human being, a landscape, a memory, a sound, or an aspect of one's self. It requires totally engaging one's perceptual, motoric, imaginative, and ideational resources while not being distracted. Absorption is argued to result from a heightened sense that the attentional object is real (Tellegen & Atkinson, 1974).

Acting students are encouraged to become immersed in a character's life (Stanislavski, 1936/1948, 1950), an activity that calls for absorption. Sarbin (1950) demonstrated how readily absorbed actors become: he reported that actors were unaware of the audience or of other objects during a performance because they lost themselves in their role. Research has also shown that actors score higher than do nonactors on openness-to-experience (Nettle, 2006). Openness-to-experience is one of the Big Five personality factors (Church, 1994) and is strongly correlated with absorption scale scores (Glisky, Tataryn, Tobias, Kihlstrom, & McConkey, 1991). Taken together, the evidence supports the hypothesis that actors may score higher than nonactors on a scale of absorption.

Fantasy Proneness

Fantasy prone individuals spend a large amount of time fantasizing and daydreaming, and are typically excellent at fabricating stories, role playing, and pretending to be someone else (Merckelbach, 2004). They are also able to experience physical symptoms when fantasizing about an illness. Actors may be individuals who excel in fantasy, a capacity that may be needed to portray characters and their circumstances in a believable manner. Some fantasy prone adults report having strong parental encouragement to en-

gage in imaginary activities as children, whereas others report a heightened frequency of unpleasant childhood events and a consequent turning to fantasy to cope with or escape from negative experiences (Merckelbach, Horselenberg, & Muris, 2001). Consistent with these reports, Goldstein and Winner (2009) found that, in comparison with a group of nonactors, professional adult actors report a greater percentage of their childhood living in fantasy worlds. Of course, fantasy proneness is not unique to actors; one study showed that dancers score higher on fantasy proneness than do athletes (Thomson & Jaque, 2015).

Fantasy proneness has been associated with hypnotizability (Merckelbach et al., 2001). During their research on hypnosis, Wilson and Barber (1982) found that highly hypnotizable individuals have a developed fantasy life that often proves to be of hallucinatory-like intensity. They developed the concept of fantasy proneness after extensively analyzing case descriptions of highly hypnotizable people who often displayed a pervasive and deep preoccupation with fantasy. These highly hypnotizable people spent large amounts of time fantasizing, had vivid childhood memories, and experienced strong bodily reactions to fantasies such as intense religious experiences or out-of-body, paranormal experiences. These traits, in turn, play an important part in their ability to become hypnotized.

This previous work leads to the hypothesis that acting and hypnotizability are related, but there has been little empirical study of this possibility. One study, by Sarbin and Lim (1963), showed that college students rated high in role-taking ability were above the mean in hypnotizability. Some students who rated low on role-taking ability scored high on hypnotizability, but the reverse was not true. Thus, although high role-taking is not a necessary component of hypnotizability, high role-taking ability does seem to predict high hypnotizability. However, Sarbin and Lim (1963) did not study acting students. Instead, they recruited nonartists and had them perform an improvised scene, which was then rated by members of a theater department. In contrast, in the study reported here, acting students were the target group. Because other research has suggested that abilities related to hypnosis may be found in individuals in any art form (Thomson, Keehn, & Gumpel, 2009; Wild, Kuiken, & Schopflocher, 1995), we included one art control group (music students) along with one nonart control group (psychology students). In addition, Sarbin and Lim (1963) informed their participants that they would be hypnotized, and this may have led to role expectancy. It should be noted that we did not hypnotize participants, but rather asked about whether short imagined experiences felt real.

In summary, we tested the hypotheses that actors should score significantly higher than control groups of artists and nonartists on imaginative suggestibility, absorption, and fantasy proneness. We chose to use three measures which, although correlated, measure separate domains, in order to determine whether our results would be consistent across them.

Method

Participants

Forty-nine undergraduate students (20 male, 29 female) from a university in the northeast of the United States participated. Ages ranged from 18 to 50 years, with a median of 20.5 years (SD = 4.48). The 50-year-old participant was an outlier in age only (the next oldest participant was 23 years old). This participant was included in the analyses after we confirmed that none of our outcome scores from this participant fell outside of one standard deviation from the mean.

Participants completed a demographic questionnaire where they described their acting and music experience. This information was used to classify participants as actors, musicians, or nonartists. The actor group (n = 16, 5 male & 11 female) consisted of participants who had declared their major as acting or who had taken college level acting classes and/or more than a year of extracurricular acting training. The musician group (n = 13, 10 male & 3 female) consisted of participants who had declared their major as music or who had taken college level music classes and/or more than a year of extracurricular music training (either for singing or a musical instrument). The nonartist group (n = 20, 5 male & 15 female) consisted of participants who had declared their major as something other than acting or music.

Nonartists were recruited via Sona Systems (an online participation tool) and were compensated with one class credit for participation in the study. Actors and musicians were recruited via email and compensated by being entered into a raffle for a $25 Amazon.com gift card. Although ideally participants should all be compensated in the same way, this did not prove practical given the difficulty of recruiting artists. This study was approved by the Boston College Institutional Review Board.

Measures

So that the measures could be easily compared, we asked participants to record their responses to each question on 7-point Likert scale. Although we do not know of other research on actors that has adopted this method, Jamieson (2005) recommends administering the Tellegen Absorption Scale with a continuous scale, rather than a categorical one, to provide a more nuanced response.

Imaginative Suggestibility—Creative Imagination Scale (CIS). The Creative Imagination Scale (CIS; Wilson & Barber, 1978) was used to assess imaginative suggestibility. The CIS has a test–retest reliability correlation of r = .82 (p < .01) and a split-half reliability of r = .89 (p < .001; Wilson & Barber, 1978). In the CIS, participants are asked to close their eyes, experience 10 imagined situations as real, and then rate the similarity of the imagined experiences to real ones. The orally presented suggestions are worded in a way that guides the subjects in thinking and imagining along with responding to the suggestions.

The CIS correlates strongly with response to hypnosis (Sheehan, McConkey, & Law, 1978), imagery or imagining, suggestibility, and to absorption (Barber & Wilson, 1978). The suggestions in the CIS are representative of the types of suggestions that are given to hypnosis subjects, but can be administered with or without a prior hypnotic induction procedure. Therefore, the CIS can be presented as either hypnosis or as a test of imagination (Barber & Wilson, 1978). We presented the suggestions to the participants without hypnotic induction and, thus, the CIS served as a test of imaginative suggestibility. Had we presented this scale differently, it could have been used as hypnosis and would have required a different

Institutional Review Board and informed consent procedure. The suggestions call on experiencing:

- physical sensations ("Your arm is getting heavier and heavier.")
- hallucinations ("Picture yourself on a mountain where the snow is melting.")
- time distortion ("You can make time seem to slow down.")
- age regression ("Bring back the feeling that you experienced when you were in primary school.")
- imagining oneself in a different location ("Feel yourself lying . . . on a beach.")

The script was audio recorded for this study by one of the authors (Robin Rosenberg) and played on a CD. After being asked to experience all 10 suggestions, participants were asked to report the similarity between their imagined experience and a real one. Participants rated how much they agreed or disagreed with the statements through a self-report Likert scale ranging from 1 = *not at all the same* as the real thing to 7 = *almost exactly the same*. Higher scores reflected greater imaginative suggestibility.

Absorption—Tellegen Absorption Scale (TAS). The Tellegen Absorption Scale (TAS; Tellegen & Atkinson, 1974) was used to assess absorption. Tellegen and Atkinson (1974) report high reliability for all of the scales used to construct the TAS, but do not report the reliability of the actual TAS. The TAS is a 34-item self-report questionnaire that asks participants to indicate their tendencies to focus on and become absorbed in a variety of sensory and imaginative experiences. The TAS is regarded as having a consistent relationship with hypnotizability; Tellegen and Atkinson (1974) characterized highly hypnotizable individuals as having openness to experiences and openness to self-altering and absorbing experiences. The TAS consists of nine components that assess separate aspects of absorption:

- responsiveness to engaging stimuli ("I can be greatly moved by eloquent or poetic language.")
- responsiveness to inductive stimuli ("When I listen to music I can get so caught up in it that I don't notice anything else.")
- tendency to think in images ("My thoughts often don't occur as words but as visual images.")
- ability to summon vivid and suggestive images ("Sometimes I can change noise into music by the way that I listen to it.")
- tendency for cross-modal experiences, for example, synesthesia ("I find that different odors have different colors.")
- ability to become absorbed in own thoughts and imaginings ("I am able to wander off into my thoughts while doing a routine task and actually forget that I am doing the task, and then find a few minutes later that I have completed it.")
- tendency to vividly reexperience the past ("Sometimes I feel and experience things as I did when I was a child.")
- experiences of expanded awareness, for example, ESP-like ("Things that might seem meaningless to others often make sense to me.")
- experiences of altered states of consciousness ("I sometimes 'step outside' my usual self and experience an entirely different state of being.").

Participants rated how much they agreed or disagreed with the statements through a self-report Likert scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. Higher scores reflect greater absorption.

Fantasy proneness—Creative Experiences Questionnaire (CEQ). The Creative Experiences Questionnaire (CEQ; Merckelbach et al., 2001) was used to assess fantasy proneness. The authors of the CEQ avoided references to fantasy in the title because they believed that term might have negative connotations for some participants. The CEQ has a test–retest reliability correlation of $r = .95$, Cronbach's alpha internal consistency = .72 (Merckelbach et al., 2001), and correlates with the TAS at $r = .76$ (Merckelbach, Muris, & Rassin, 1999). It is a 25-item questionnaire found to strongly correlate with standard measures of absorption (Merckelbach et al., 2001). The CEQ consists of three components:

- developmental antecedents of fantasy proneness ("As a child, I was encouraged by adults to fully indulge myself in fantasies and daydreams.")
- intense elaboration of involvement in fantasy or imagination ("I spend more than half the day fantasizing or daydreaming.")
- concomitants and causes of fantasy ("As a child, I often felt lonely.")

Participants rated how much they agreed or disagreed with the statements through a self-report Likert scale ranging from 1 = *strongly disagree* as the real thing to 7 = *strongly agree*. Higher scores reflect greater fantasy proneness.

Procedure

Depending on scheduling constraints, participants were tested either individually or in groups of up to three people. Although this may have caused differences in responding, unfortunately we did not retain data on the setting in which participants completed the study. Participants were advised that they had a right to withdraw from the study at any time. They were brought into a testing room and given a questionnaire packet[1] that took approximately 45 minutes to complete. Participants were informed that one of the measures would involve listening to an audio recording and answering questions afterward.

Because imaginative suggestibility has been shown to be sensitive to demand characteristics surrounding labeling (Gandhi & Oakley, 2005), the title of each scale was concealed. Previous research has also noted that when imaginative suggestibility and absorption measures are administered together, scores can be affected by the order in which they are presented (Milling, Kirsch, & Burgess, 2000). The order of the scales was therefore randomized for each experimental session. Participants were debriefed about the purpose of the study after completing the measures and, at the request of our IRB, we provided contact information for the

[1] The four target scales were presented along with the following scales used in another study and not discussed in this article: Wilson-Barber Inventory of Childhood Memories and Imaginings, Dissociative Experiences Scale-II, Behavioral Inhibition Scale, Behavioral Activation Scale, Psychoticism Scale, Emotion Regulation Questionnaire, and Massively Multiplayer Online Role Playing Games Questionnaire.

university's counseling service because we asked questions about the stability of participants' mental health.

Results

Cronbach's Alphas for each of our scales for our sample were as follows: CIS $\alpha = .57$, TAS $\alpha = .94$, CEQ $\alpha = .89$. A bivariate correlational analysis showed that performances on all three scales were significantly correlated with one another. The Creative Imagination Scale (CIS) correlated with the Tellegen Absorption Scale (TAS) at $r = .43$, $p = .002$, and with the Creative Experiences Questionnaire (CEQ) at $r = .43$, $p = .002$. The TAS and CEQ correlated with each other at $r = .63$, $p < .001$. Of course, scores on these three measures were not perfectly correlated; hence not all individuals who score high on one scale were expected to score high on the others. We are not aware of previous studies showing a correlation among these three measures. However, Merckelbach, Horselenberg, and Schmidt (2002) reported a correlation among the TAS, CEQ, and Inventory of Childhood Memories and Imaginings (ICMI) at $r > .75$. The ICMI is a measure of fantasy proneness on which the CEQ is based. Therefore, our study is an initial test of relatedness of these three particular scales, as well as a test of the connections of these measures to theater experience.

A MANOVA was conducted, with group as the between-subjects variable, on the scores of the Creative Imagination Scale (CIS), the Tellegen Absorption Scale (TAS), and the Creative Experiences Questionnaire (CEQ). There was an overall multivariate main effect for group (*Pillai's Trace* = 0.38, $F(6, 90) = 3.54$, $p = .003$). Pillai's criterion was selected to test the significance of main effects because it is the most robust of the multivariate statistics (Olson, 1979). Figure 1 displays the mean scores and standard errors for each group on each measure. Table 1 displays the mean scores and standard deviations for each group on each measure.

A MANCOVA was then conducted with age and gender as covariates. Age was covaried because of an outlier. Gender was covaried due to unequal numbers of males and females in each group. These covariates were not significant (all ps $> .33$) and did not alter the significance of the overall multivariate main effect for group (*Pillai's Trace* = .36, $F(6, 86) = 3.11$, $p = .008$). Below we report the effect of group on each of the scales separately.

Table 1
Mean Scores and Standard Deviations on the Creative Imagination Scale, Tellegen Absorption Scale, and Creative Experiences Questionnaire for Actors, Musicians, and Nonartists

Subject	*N*	Creative Imagination Scale	Tellegen Absorption Scale	Creative Experiences Questionnaire
Actors	16	4.78 (.87)	5.12 (.57)	3.75 (1.16)
Musicians	13	3.75 (1.16)	4.52 (.76)	3.38 (.78)
Nonartists	20	3.86 (.99)	4.25 (.98)	3.39 (.67)

Imaginative Suggestibility—Creative Imagination Scale (CIS)

There was a main effect of group on the CIS scores, $F(2, 48) = 4.95$, $p = .011$. LSD post hoc tests showed that the actors' scores were significantly higher than those of musicians ($p = .009$, CI = .27–1.78, *Cohen's d* = 1.005) and those of nonartists ($p = .009$, CI = .23−1.59, *Cohen's d* = .99). There was no significant difference between the scores of the musicians and nonartists.

Absorption—Tellegen Absorption Scale (TAS)

There was a main effect of group on the TAS scores, $F(2, 48) = 5.23$, $p = .009$. LSD post hoc tests showed that the actors' scores were marginally significantly higher than those of musicians ($p = .055$, CI = −.014–1.19, *Cohen's d* = .89) and significantly higher than those of nonartists ($p = .002$, CI = .32–1.41, *Cohen's d* =

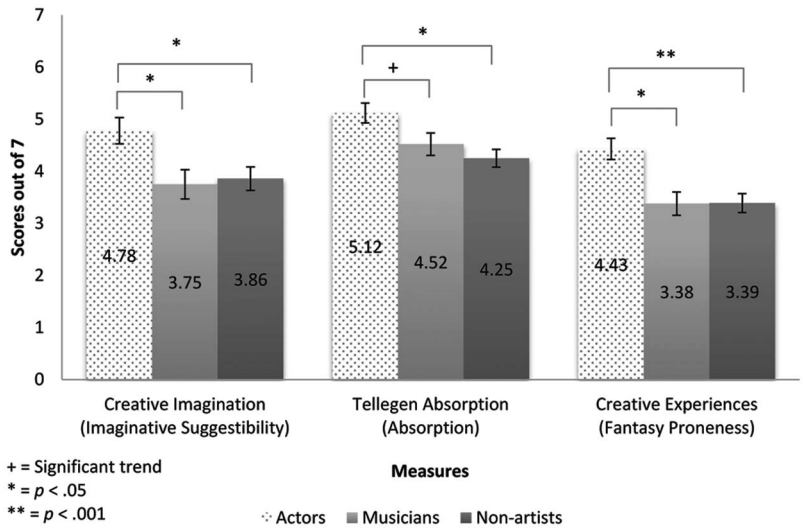

Figure 1. Mean scores and standard errors on the Creative Imagination Scale, Tellegen Absorption Scale, and Creative Experiences Questionnaire for actors, musicians, and nonartists.

1.085). There was no significant difference between the scores of the musicians and nonartists.

Fantasy proneness—Creative Experiences Questionnaire (CEQ)

There was a main effect of group on the CEQ scores, $F(2, 48) = 10.0$, $p < .01$. LSD post hoc tests showed that the actors' scores were significantly higher than those of musicians ($p = .001$, CI = .48–1.63, *Cohen's d* = 1.27) and those of nonartists ($p < .001$, CI = .52–1.56, *Cohen's d* = 1.34). There was no significant difference between the scores of the musicians and those of the nonartists.

Discussion

As hypothesized, our results were consistent across the three measures: the actors reported higher levels of imaginative suggestibility, absorption, and fantasy proneness than did musicians and nonartists, even when covarying for age and gender distribution of our groups. These findings add to our understanding of the psychology of the actor.

Actors rated their experience of adopting the suggested situations described in the Creative Imagination Scale (CIS) as significantly closer to real experiences than did musicians and nonartists. Because the CIS has been reliably implemented as a measure of imaginative suggestibility (Barber & Wilson, 1978; Laidlaw & Large, 1997), we suggest that actors have a greater ability to conjure sensory experiences and manipulate memories than do musicians or nonartists. Actors are individuals with an excellent ability to act "as if" a suggested circumstance is real (Sarbin & Lim, 1963) and who strive to experience imagined situations as real during their training. Acting exercises teach acting students in different techniques to experience an imaginary person, circumstance, sound, touch, or smell as real. Frequently participating in these exercises may increase actors' ability to experience an increased vividness of imagined experiences. Furthermore, actors may feel more motivated than musicians and nonactors to experience imagined situations as real because their craft depends on this ability. Of course, individuals with higher levels of these traits may also be interested in pursuing acting as a profession or major because of the ability to spend time in these states when acting.

Actors reported having more absorption experiences described in the Tellegen Absorption Scale than did musicians and nonartists. We conclude that actors are more able to focus their attention so that they may become absorbed in their character; this is not a skill practiced by musicians and nonartists. Whereas nonartists may sometimes become absorbed in daily activities or fantasize and daydream, actors often do so in their daily performances and rehearsals. Some acting exercises require the actors to become so involved in the fantasy of the script that it feels to them that it is actually happening. One of these techniques that actors use is to become absorbed in a memory of a personal past event similar to the circumstances of the script (Stanislavsky, 1950). Once actors are immersed in their characters, they are encouraged to experience and react to their surroundings spontaneously. Similarly, Tellegen (1981) suggested that people who score high on absorption adopt an experiential mode of functioning. This is characterized by a readiness to experience attentional objects (i.e., a person, landscape, memory, sound, and taste) for their own sake and to elaborate their meaning outside the context of predetermined plans, goals, or performance.

Actors expressed significantly more fantasy proneness in the Creative Experiences Questionnaire than both musicians and nonartists. We therefore conclude that actors may spend larger amounts of time fantasizing than do musicians and nonartists. Furthermore, actors' fantasies may be intense and may lead to strong bodily reactions (Wilson & Barber, 1982). Our findings are consistent with the suggestion that traits of fantasy prone people are associated with acting. Acting, in general, is a form of role play in which actors pretend to be a character. Fantasy prone people have been found to be very good at both role playing and pretending to be someone else (Merckelbach, 2004). Acting training contains some exercises that focus on teaching the actor how to create psychosomatic reactions, something fantasy prone individuals may inadvertently do (Merckelbach et al., 2001).

We recognize that one limitation of this study is based on a small sample size. However, the fact that significant findings were obtained suggests that our sample was large enough to detect an effect. An additional limitation of this study is its correlational design. It may be that individuals who have a predisposition to imaginative suggestibility, absorption, and fantasy proneness are also more likely to want to major in and experience acting training. Without the ability to conduct a true experiment, we are unable to form any conclusions on whether acting training, per se, enables, causes, or allows individuals to gain in these areas. Nonetheless we offer the tentative conclusion that actors possess three traits that are associated with high hypnotizability: imaginative suggestibility, fantasy proneness, and absorption.

Our findings might mean that actors are more hypnotizable than musicians and nonartists, though this study did not directly attempt to hypnotize participants. Should actors be more hypnotizable, this would be beneficial in allowing them to alter their experiences and adopt imagined situations as real, and, thus, believably portray their characters. Future studies should test whether actors are actually more hypnotizable than other kinds of artists and nonartists. We propose here, however, that hypnosis is similar to what actors do to "become" their characters. The results reported here are first attempts to elucidate how it is that actors are able to portray characters so convincingly.

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