# Claremont Colleges Scholarship @ Claremont

**CMC Senior Theses** 

CMC Student Scholarship

2011

# How to Win Jobs and Influence Interviewers: A Psychological Exploration of Job Interview Best Practices

C. Diggory Rycroft Claremont McKenna College

# Recommended Citation

Rycroft, C. Diggory, "How to Win Jobs and Influence Interviewers: A Psychological Exploration of Job Interview Best Practices" (2011). CMC Senior Theses. Paper 271.

http://scholarship.claremont.edu/cmc\_theses/271

This Open Access Senior Thesis is brought to you by Scholarship@Claremont. It has been accepted for inclusion in this collection by an authorized administrator. For more information, please contact scholarship@cuc.claremont.edu.

How to Win Jobs and Influence Interviewers: A Psychological Exploration of Job Interview Best Practices

C. Diggory Rycroft

Claremont McKenna College

# **TABLE OF CONTENTS**

Abstract	3
Chapter 1: Introduction: Finding a Career in America	4
1.1: Historical Review of Research and Changes	6
Chapter 2: Within-Interview Factors	12
2.1: Impacts of Nonverbal Behaviors	14
2.2: Impacts of Articulative Behaviors	25
Chapter 3: The Interviewer, the Organization, and other Interviewee-External Characteristics	34
Chapter 4: Conclusions, Recommendations, and Areas for Future Research	43
4.1: For the Employer	43
4.2: For the Interviewee	49
4.3: Directions for Further Research	51

#### **ABSTRACT**

Navigating the formal employment interview has long been an imposing obstacle to acquiring gainful employment in the white-collar world, particularly that of the United States. Conventional wisdom offers a wide variety of suggestions for achieving the best possible outcomes from the interview, for instance smiling, having a firm handshake, demonstrating interest in the company, and "being yourself." Much of this common knowledge is based primarily in intuition and carry-over from standard conversational best practices, rather than rigorous empirical testing. As such, this literature review sets out to bring together the various works of interview research that currently exist, with the goal of determining A) what candidate behaviors are most conducive to high interview ratings, B) strategies for coping with the effects of interview and interviewer characteristics on the interview's reliability and validity, and C) areas of this still-growing topic that would benefit most from further research. By implementing the findings discussed in this review, employers and employees alike will be better equipped to make the best, most mutually beneficial use of the formal job interview.

#### **CHAPTER 1**

# **Introduction: Finding a Career in America**

Career success has long been a paramount goal for the working classes of the world, and particularly in America. The primary motivation for going to school is for one to become an educated, sociable, and productive individual who is either a desirable employee or entrepreneurial enough to start his or her own business, thereby securing a sufficient income and allowing for comfort, leisure, and the cultivation of the next generation. Given the undeniable ramifications of securing employment, it is no wonder that the acquisition of one's "first real job" after completion of their desired level of study is such an enormous milestone, ideally representative of the entrance into adulthood and the self-sufficiency that it brings. The vast majority of job opportunities, even those that do not require extensive experience or education, require at least one evaluative interview. In many cases, applicants who make it to the interview have already undergone an initial screening process wherein their application (often including a résumé) is scrutinized. As such, most interviews screen for more than simple acceptability, often testing for criteria that may include competence, skills, intelligence and personality fit in the organization. Recent studies have found "job gloom," or the loss of hope of finding a job, at an all-time high as a record 1.21 million have become "discouraged workers" who have quit looking for a job due to the difficulty of doing so (Luhby, 2010). Career changes per person are also particularly high, with higher estimates reaching an average of seven lifetime career changes per person (Bialik, 2010). Together, these foreboding statistics convey the importance of putting one's best foot forward as they participate in a potentially life-altering job interview.

One would hope that such a crucial process would be mostly fair and cut-and-dry, rewarding those who are most qualified, most hard-working, and most personally suitable for the job with success. In reality, of course, this is rarely the case due to nepotism, favoritism, interpersonal attraction and other ethically questionable influences tending to confound the process. In addition to these conscious issues, however, there also exists a vast range of unconscious factors that can influence evaluations of interviewees, no matter how well-prepared or qualified one might be. As this paper will show, interviewer biases, unconscious associations, and other psychological influences can have a powerful effect on interview evaluations, particularly when they go unrecognized by either party. In terms of implications, these issues potentially raise a variety of questions about the formal interview's inherent objectivity and reliability, as well as about its ability to accurately predict performance on the job. On the other hand, one must also consider the possibility that certain unconscious evaluations are actually *adaptive* and ultimately result in a more effective appraisal of candidates. Nonetheless, it appears clear that "the practice of face-to-face screening has not declined despite frequent questioning of its validity as a selection device" (Springbett, 1958; Webster, 1964); as one early researcher stated, despite the empirical shortcomings of the interview, "there seems to be a certain human curiosity which can be satisfied in no other way than by seeing the man in the flesh" (Wagner, 1965). As such, one must accept the fact that the most productive response is simply to search out as many improvements to the process as possible. Through an examination of past research on the unconscious factors governing interpersonal evaluations (both within and without an explicit interview setting), this paper will attempt to synthesize current information into a clear and actionable set of recommendations, both for interviewee preparation and for a best practices design of the interview process itself. Please note that, given the varying nature of current research in terms of what *types* of jobs are examined (i.e. one experiment may simulate an interview in the context of a sales position, whereas another may use finance) as well as in terms of interviewee demographics (i.e. experienced hire vs. college recruit), the recommendations reached in this literature review will of general applicability within the broad category of white-collar jobs requiring some college education. Suggestions for future research will also be put forth, so that our understanding of this common hurdle to employment might continue to improve.

#### 1.2 - Historical Review of Research & Changes

Before a specific look at the work that has been done on unconscious influences on the interview, it will be helpful to provide a broader historical context for this analysis. Being such an integral part of the American career world, the interview has been the subject of much research and examination for almost 100 years (Macan, 2009), resulting in several improvements and modifications as time has gone by. In 1915, early studies of the interview process began to appear, primarily targeted toward establishing that the job interview was indeed a subject ripe for scientific examination. W.D. Scott's seminal study found that, in ranking 36 prospective employees for suitability in a sales position, the six hiring professionals tested found themselves in complete disagreement, not even reaching a consensus about whether the vast majority of candidates should be in the

upper or lower half of rankings (Scott, 1915). A multitude of researchers pointed out the randomness and irregularity of the interview, describing an unstructured interview as "a disorganized conversation resulting in a series of impressions based upon impulsive reactions" (Wonderlic, 1942) and recommending that social skills be the sole characteristic evaluated by the interview, with all other factors left to well-calibrated standardized tests (Rundquist, 1947). These and other similar studies brought to light the employment interview's common issues of reliability and accuracy, thereby opening the floodgates for subsequent research into the process's problems and potential for improvement.

The second wave of interview studies began a foray into metric analyses, allowing psychologists to begin narrowing down the true sources of the interview's unreliability. E.C. Mayfield pointed out the distinction between the interview's intrarater and *inter*rater reliability, finding that the former was solid across candidates and that the latter was the one most often at fault (Mayfield, 1964). That is, inconsistencies arose most when different interviewers interviewed the same candidate. Mayfield's study began drawing attention to the interviewer as a source of some of the unreliability, thereby laying the groundwork for "structured interviews" that take interviewer differences out of the equation to a certain degree. These structured interviews allowed for a more scientific process of employment evaluation and therefore higher reliability as well. By asking all candidates the exact same questions in the same order and evaluating using an agreed-upon common rating scale, the emergence of the structured interview allowed for high accuracy, enhanced fairness, and legal indemnity as compared to a freeform interview (Structured Interviews: a Practical Guide, 2008). These qualities have

made structured interviews particularly popular for federal recruitment and more entry-level or clerical work, but are far more limited in application for evaluations that require a more dynamic understanding of the interviewee's ability to work in a team, e.g. higher-level business settings. In these situations, interviewers must decide whether they themselves would like to work with the candidate, and invariably find that a freer structure is much more reflective of a potential team situation. Thus, while the advent of the structured interview solved certain problems, it fell short in other vital areas.

Other work attempted to deconstruct the interviewer decision-making process, correlating overall candidate ratings with specific dimensional ratings (e.g. Likeability, intelligence, or diligence) for an idea of how interviewers implicitly weight different dimensions in reaching their final decisions (Dougherty, Ebert, & Callender, 1986). With this, work also began on developing interviewee training systems that would allow for higher interrater reliability.

Some concurrent research, on the other hand, arguably followed paths that led to dead ends. An example is the body of work which aimed to glean desirable candidate qualities from questionnaires of recruiting professionals, who cited such characteristics as "ability to communicate," "self confidence," "motivation" and "enthusiasm" (Downs, 1969). While such research was nonetheless helpful in its day in promoting the academic study of the job interview, any modern observer can plainly see that the descriptors' subjectivity damns them to insufficient reliability and ultimate uselessness. Fortunately, more quantifiable research was soon to follow, such as through meta-analyses of interview ratings in order to determine the inter-rater reliability of interview evaluations (Schmitt, 1976). While this body of research acknowledged the interview's ability to

elicit otherwise inaccessible information, it also reached valuable conclusions about the interview's lack of reliability and validity on its own, suggesting instead that interviews only be used in tandem with standardized interview guidance forms and statistical data (Schmitt, 1976).

Also noteworthy as a significant event in the history of job interview research is that of Title VII the 1964 Civil Rights Act, which instituted a series of laws forbidding employment discrimination on the "basis of race, color, religion, sex, or national origin" (Title 42,2000e-2. Unlawful employment practices, 1964). Other legal developments meant that employers were forbidden from asking about subjects such as family plans or personal beliefs, adding new constraints to the employer's goal of finding out as much relevant information as possible about a prospective hire. From 1964 onwards, legal considerations have had a steady presence in analyses of interview best practices (Huffcutt & Culbertson, 2011). However, as research will show in later sections, it appears that implicit forms of employment discrimination continue to thrive in many ways.

More recently, studies of the traditional, situational employment interview have revealed that the standard questions, usually pertaining to one's strengths and weaknesses, have particularly low reliability and low validity in predicting job suitability. In this situation, nothing guarantees an accurate response and interviewers have little context with which to judge their candidates. The discovery of this inadequacy resulted in the creation and widespread adoption of numerous behavioral methods of interviewing, forcing prospective employees to recount stories about their past rather than speak in the abstract. Some specific models of behavioral interviewing, such as Behavior Description

Technologies' patented "Behavior Descriptive Interviewing" method, have been estimated to be "three times more reliable" than traditional systems (McNair, 2001). Behavioral methods are now widely accepted as a necessary segment of an accurate interview, allowing employers to gauge fit and performance on the basis of the idea that "the best predictor of behavior in the future is behavior in the past" (McNair, 2001). This is not to say that the behavioral method is flawless – in addition to obvious considerations such as the ease of simply *inventing* scenarios to respond to behavioral prompts, there is also the issue of the tenuous-at-best relationship between a great interviewee and a great employee. These limitations and more will be discussed further in a later section.

Work has also been done to improve the interviewee's control of the interaction, namely through the development of "impression management," a tactic aimed toward shaping a prospective employer's evaluation of the interviewee to maximize one's chances of being hired. All interviewees, whether familiar or not with studies on impression management, will naturally engage in some forms of this behavior, for instance by such basic methods as recounting stories that place the interviewee in a positive light, or by making efforts to be energetic and affable. Studies have also shown that certain types of people are more predisposed toward different kinds of natural impression management, such as an altruistic person focusing on gaining approval vs. defensive excuses, whereas a self-disciplined person might engage in more self-promotional tactics (Iddekinge, McFarland, & Raymark, 2007). Adding to the catalogue of actionable information for interviewees, studies in the 1990s began evaluating distinct impression management tactics for relative effectiveness, finding that "self-focused" tactics such as self-promotion, entitlements (taking responsibility for positive background

events), and exemplification (attempting to convince the interviewer that the interviewee could function as a positive exemplar for others) are significantly more effective than "other-focused" tactics, which include interviewer flattery, opinion conforming, or implicit offers of favors (Kacmar, Delery, & Ferris, 1992).

Today, the vast majority of research can be characterized as exploring issues of construct validity. That is, determining what factors interviews are supposed to be measuring, and how well they are in fact represented in both experimental and ecological settings. The search for answers is complicated by the often "complex and multifaceted" nature of measured constructs, for instance in the way that a given behavioral question might elicit demonstrations of conscientiousness, emotional stability, and diplomacy all at the same time (Huffcutt & Culbertson, 2011). All of these dimensions would need to be credited for an accurate evaluation. Moreover, such an evaluation is made even more complex by the fact that no matter how much painstaking operationalization takes place, all of these dimensions are inherently subjective and thus subject to disagreement.

#### **CHAPTER 2**

#### **Within-Interview Factors**

Having provided an overview of the changes that have been made so far in our understanding of the employment interview, one can begin to synthesize the research that has not yet been widely applied to interview methods, beginning with an examination of the psychological effects that an interviewee's behavior and characteristics can have on his or her assessment. These within-interview qualities can be divided into three types: nonverbal, articulative (pertaining to the non-content aspects of speech), and verbal, although since the verbal aspects of the interview are predominantly based on the actual content of speech, they surpass the scope of this paper, such that we will only be focusing on the former two. The consensus on the relative importance of these three categories has fluctuated over the years. One early experimenter, M.D. Hakel, stated in 1973 after preliminary studies that "it's not just what you say, it's how you say it," before proceeding four years later with the more extreme conclusion that "it's not what you say, but how you say it" (Hollandsworth, Kazelskis, Stevens, & Dressel, 1979). Having moved on from the giddy excitement of those early studies, more recent appraisals have generally taken a more tempered approach, recognizing the importance of each segment in its own right and speaking more of the factors' interactions than any hierarchy of importance. As with most issues in psychology, the numerous factors at play each have

their own valuable effects on outcomes, and any serious examination must consider the potential impacts of each of them.

To clarify, this paper's omission of verbal content-related factors is by no means an indicator of unimportance or irrelevance. On the contrary, verbal content arguably remains the most important interview factor, since candidates are ultimately judged mostly on what they say, with their ways of saying it acting as mediators and influencers that merely adjust the content's impact. However, because of the rather straightforward nature of the topic, there is a dearth of interesting psychological research pertaining to it, with the exception of a few studies on, say, the impacts of "umm" and "ahh" hesitations (Russell, Perkins, & Grinnell, 2008), or the rather obvious-seeming fact that statements claiming one's sociability and good character have a positive impact on the interview (Hollandsworth, Kazelskis, Stevens, & Dressel, 1979). As such, the discussion of withininterview factors will be primarily concerned with nonverbal and articulative factors. Furthermore, note that unless otherwise indicated, each study makes primary use of college-aged subjects and confederates. As such, caution should be applied before testing findings for experience levels other than entry-level, since most results have not been tested in said contexts. Now, because much of the most well-known current research has focused on nonverbal behaviors, to the extent that many elements have even slipped into common knowledge, this portion makes for a suitable starting point for a synthesis of research.

# 2.1 - Impacts of Nonverbal Behaviors

Due to the inherent appeal of identifying and quantifying the impacts of subtle nonverbal behaviors, which so often fly under the proverbial radar of human detection, there is a rather large body of research on the topic. Albert Mehrabian, a pioneer of nonverbal behavior analysis, defined nonverbal behavior as including facial expression, hand and arm gestures, posture, and general movements of the body (Mehrabian, 1972). As is often the case in new areas of research, the earliest ground was broken with relatively general studies that aimed primarily to establish the importance of nonverbals in an interview setting. One influential 1978 experiment had employment recruiting professionals evaluate videos of job interviews in which the candidate displayed either "high nonverbal" (strong eye contact, high energy, high affect and voice modulation, and high speech fluency) or "low nonverbal" (the opposite) behaviors while delivering precisely the same verbal content. Each of the 52 subjects viewed only one of the two conditions before being asked to make an employment decision. The results were telling: 23 of the 26 viewers of the high nonverbal candidate elected to invite him back for a second interview, whereas *none* of the 26 viewers of the low nonverbal condition recommended a second interview. Many other studies have corroborated these findings through the discovery of positive correlations between "ratings of posture and mannerisms [and] hiring ratings" (Barbee & Keil, 1973; Young & Beier, 1977). The effects of nonverbal behaviors vs. verbals was particularly well demonstrated in Ronald Riggio's 1968 experiment, which had groups of judges view mock hiring interviews and rate subjects on performance, physical attractiveness, and dress. The experiment set out to test whether a 40-minute interviewing training session would have a significant effect on interviewee ratings, but ended up finding that although training made no significant difference, there *was* a strong connection between performance ratings and *appearance* ratings, among others. In general, the majority of existing research is very supportive of the importance of nonverbal qualities in an interview setting.

Though theorists are primarily in agreement regarding the fact that nonverbal behaviors are indeed important, there are several different theories about how these actions actually function in social interactions. One theory is that nonverbals are primarily used to set the tone of interactions, i.e. by demonstrating "dominance or status differences, and affiliation or aggression" (Argyle, Non-verbal communication in human social interaction, 1972). Body language adjusts, most cases subconsciously, to convey the feelings one has regarding the other party or parties present. In addition to obvious, overt displays such as those of anger or happiness, the body also depicts a series of largely involuntary, subtler emotions such as disdain, respect, hostility, fear, or nervousness. Many of these are evolutionary traits adapted for a more primitive time, when an interpersonal conflict might have singly determined life or death and/or reproductive success (Lakin, Jefferies, Cheng, & Chartrand, 2003; Ekman & Friesen, 1969). Evidence of the inherent nature of these nonverbals has been found in droves, such as in studies of sense-deprived (commonly blind) individuals who develop nonverbal behaviors without ever having observed them (Knapp & Hall, 2009). The evolutionary roots of nonverbals explain to some degree their strength and subconscious nature, i.e. why they can have such powerful impacts on interpersonal evaluations.

Other theorists place more emphasis on a different function of nonverbal behaviors, namely their role in modulating conversation. Abercrombie (1968) put forth

that while speaking itself is a product of our vocal chords, we "converse with our whole bodies," making use of physical cues to set the rhythm, tone, and direction of an interaction. This is why conversations over the phone or, worse yet, using text, can be so easily misunderstood or misinterpreted. There is a great deal of meaning that can be gleaned from examining one's nonverbal behaviors, both intentional and unintentional. For example, "a speaker accompanies his utterances with the appropriate facial expressions, which are used to modify or frame what is being said, showing whether it is supposed to be funny, serious, important etc" (Vine, 1971). Facial expressions are not only a way of expressing one's emotions, but allowing conversation partners to empathize by mirroring said emotions. Consequently, the presence or lack of mirroring can also be a strong indicator of how engaged one's listener is in the conversation, which makes it a strong success indicator in the interview setting. Another example is that of head movements; slow, controlled nodding displays understanding, and implicitly requests that the speaker continue talking, whereas "a rapid succession of nods indicates that the nodder wants to speak himself" (Forbes & Jackson, 1980). Given these frequently-experienced pieces of evidence, one can conclude that conversation modulating features are just as important a function of nonverbals as are those more instinctive, evolutionarily adapted aspects, and make an unquestionable contribution to interview evaluations.

For the sake of better measurement of the myriad nonverbal factors at play in interpersonal interactions, a great deal of work has been done to deconstruct and quantify the effects of the sub-behaviors that comprise "good" or "bad" nonverbal states. Through this work, researchers have been able to provide specific, actionable recommendations as

well as to continue building foundations from which future research can work. Some of the studies are based on reexaminations of "common knowledge" type recommendations which have permeated the basic advice most often given to job candidates. Far from redundant, these studies actually undertake the valuable task of testing the expected effects of these suggestions, as well as quantifying them so that one might get a better idea of the order of importance of factors. One such study analyzes the oft-shared piece of advice about the importance of good eye contact. Too little, says conventional wisdom, and one will look timid, uninterested, and/or unconfident. Too much, on the other hand, and one runs the risk of aggressively overwhelming his interviewer. In fact, research shows that normal-to-high degrees of gaze are strongly correlated with ratings of interviewees as "credible and attractive," with interviewers feeling consistently higher "intimacy ... similarity ... immediacy and involvement" with the interviewee than in an averted-gaze situation (Burgoon, Manusov, Mineo, & Hale, 1985). Of course, the myriad different valid coding schemes that apply to interview evaluations mean that there is much room for disagreement. For example, T. M. Helminen's 2011 study on the same subject concurred only partially, finding medium eye-contact to convey greater approachability but that unwavering eye contact resulted in discomfort (Helminen, Kaasinen, & Hietanen, 2011). This dispute is somewhat understandable due to the inherent artificiality of the "excessive eye contact" scenario. That is, most people will either be naturally inclined toward minimal or medium eye contact, with the excessive condition likely only arising in a conscious, overcompensatory attempt to hold eye contact. As such, the mimicking of this condition could cause highly varying responses simply by virtue of being unusual. In any case, these two studies represent a fairly good

microcosm of the body of research in general: much agreement has been reached on major effects, but there remains some dispute about less common scenarios.

Another hypothesis about eye contact is based on the finding that people share eye contact longer and more often when they are farther apart, indicating that eye contact and physical proximity might function as substitutes in non-hostile situations for demonstrating intimacy and comfort (Argyle & Dean, 1965). Over- or underuse of eye contact, therefore, sends an inappropriate signal of emotional proximity that fails to reach equilibrium with the physical distance between the parties, which explains the discomfort and an incomplete interpersonal connection that results in a negative interviewee evaluation.

Next on the list of commonly-held beliefs is that of the importance of a strong handshake to ensure a good impression and, consequently, a positive hiring decision. Studies on this factor are relatively scarce, but at least one (Stewart, Dustin, Barrick, & Darnold, 2008) has established significant effects for handshake quality (operationalized by firmness and rhythm) on interviewer hiring recommendations. A strong handshake boosted interviewer perceptions of extraversion, which was related to a more positive ranking overall. Women received lower handshake ratings overall, but did *not* receive lower employment suitability ratings, suggesting higher expectations for the quality of a male's handshake versus a female's. Therefore it would appear that a good handshake really is a vital influence on the hiring decision, particularly in its role as a mediator in first impressions.

While affirmations of existing suspicions certainly have their use, there also exists a significant portion of research has managed to dispel commonly accepted beliefs

about the interview. Most would likely agree that a smiling, nodding, generally agreeable interviewee is likely to win the favor of his interviewer and positively influence the hiring decision. It is often the case that one might adopt these behaviors in an attempt to ingratiate themselves with their interviewer by showing "agreement and attitude alignment" (Kacmar, Delery, & Ferris, 1992). On the contrary, findings indicate that such behaviors are actually counterproductive, due in part to their focusing of attention on the interviewer's ideas and personality rather than those of the interviewee (Kacmar, Delery, & Ferris, 1992).

In a surprising contradiction of common assumptions, numerous studies have found agreement regarding the superiority of "self-focused" impression management tactics versus their "other-focused" counterparts (Peeters & Lievens, 2006; Varma, Toh, & Pichler, 2006). Perhaps because such a large body of research (often dealing with improving conversational skills in autistic children) (Palmen, Didden, & Arts, 2008; Cameron, 1999; Sherer, Pierce, Paredes, Kisacky, Ingersoll, & Schreibman, 2001; Hurtig, Ensrud, & Tomblin, 1982) has emphasized the importance of question-asking and demonstrated other-party interest for successful conversations, intuition might suggest that the same rules would apply to the employment interview. The findings to the contrary indicate that the agreed-upon set of social rules for maximizing mutual enjoyment of day-to-day conversations is potentially even more different from that of the employment interview than previously thought. This conclusion calls into question the glibly spewed advice of "treat the job interview like a conversation," and suggests that a more specialized treatment could potentially yield more benefits.

It is important to note one caveat: while the majority of these cited studies emphasize the surprising ineffectiveness of ingratiating, overly agreeable behaviors, this phenomenon may be related strongly to the *type* of job being interviewed for. Most of the aforementioned documentations of studies neglect to mention what evaluators were told about the specific job at stake, which makes it difficult to reach a firm conclusion about the effect of job-type expectations on evaluations. Nikolaou's (2003) study comes to the rescue, clarifying the distinction between jobs with and without a central "interpersonal interactions" requirement (e.g. customer service vs. accounting), and finding that the former actually finds a positive relationship between job performance and agreeableness. Suitably, a study based around more "enterprising, investigative, or realistic [rather than social] occupations" (Judge, Higgins, & Thoresen, 1999) concluded that too much agreeableness would be counterproductive in these situations. The primary implication here is that, as useful as the research on nonverbal behavior is, it should always be adapted in practice to fit the personality and capability requirements of one's desired occupation.

An additional category of nonverbal characteristics, independent from one's behavior, comes in a candidate's physical appearance. Conventional wisdom is fairly confident in its conclusions about this matter: with all other factors held equal, people generally prefer to interact with a physically attractive person over a less attractive one. In addition to being more enjoyable to regard, attractive people also carry the potential promise of sexual reproduction, whether intentionally or not (Kanazawa, 2004). In an interview setting, one would intuitively predict that these findings would carry over, granting more physically attractive individuals an advantage compared to others. Actual

findings on the validity and extent of the phenomenon vary somewhat. Andreoli's 2009 work on female physical attractiveness in selection procedures found that "above a particular [attractiveness] threshold, the association between attractiveness and positive job traits increase together rapidly," but that those who were rated either extremely attractive or extremely unattractive were both rated low for positive job traits (Andreoli, 2009). Similarly, a 1986 study found that the "physical attractiveness of job candidates had the broadest influence on employment decisions" (Gilmore, Beehr, & Love, 1986). On the other hand, it appears that the majority of studies call for a more mitigated view of the effect of candidate attractiveness. A 1993 experiment found that "there was a small but significant bias toward attractive applicants in interview evaluations but not in the actual admissions decisions" (Shahani, Dipboye, & Gehrlein, 1993), and another found (against experimenters' predictions) that their "results [did] not support a physical attractiveness effect on preinterview impressions" (Greg W. Marshall, 1998). A third study also failed to find any effects of attractiveness, instead finding that social performance and experience were the factors that comprised interviewee ratings (Greenwald, 1981). While the discovery of a main effect is scarcely found in the available literature, one study made the interesting finding of an interaction effect such that more attractive people had their "good" nonverbal behaviors appreciated to a greater degree than did less attractive people (Young, Beier, & Beier, 1979). Lastly, one study found that well-applied *makeup* (for females) was actually the most effective appearancerelated factor, with participants reporting perceptions of better health and more confidence in made-up faces, as well as "awarding [them] greater earning potential and ... more prestigious jobs" (Nash, Fieldman, Hussey, Lévêque, & Pineau, 2006).

However, one should take these ostensibly conclusive results with a grain of salt: a glance at the detailed Authors section reveals that two of the five authors work for L'Oreal France's research wing, suggesting a potential conflict of interests.

On the other hand, at least one influential study has found that high attractiveness can actually have considerable *negative* effects as well (Agthe, Spörrle, & Maner, 2011). Specifically, in same-sex interviewing situations, interviewers can feel threatened by more attractive interviewees and begin to view them as anxiety-causing sexual competitors, and therefore use their decision-making power to enforce as much interpersonal distance as possible and prevent their own decrease in status as a mate. Interestingly, the second phase of the same study found that this phenomenon was also significantly apparent in *college admissions* procedures. Because admissions officers do not generally spend much time in the same environment as the students whom they accept, this finding suggests that the tendency of interviewers to reject attractive members of their same sex is perhaps less a conscious, future-conscious attempt to maintain mating status, and more rooted in a primal desire to distance oneself from a superior member of the same sex to avoid comparisons by potential mates. In both of these contexts, however, researchers found that the effects were heavily mitigated by the self-esteem of the evaluator. That is, interviewers with high self-esteem did not discriminate against attractive same-sex interviewees, presumably because they did not view them as threats. All in all, the precise degree to which attractiveness affects hiring decisions is unclear, but findings indicate that there are both benefits and detriments for both very attractive and average-looking people. More unattractive people, unfortunately,

do not appear to receive significant advantages from any human psychological biases. It is lucky for them that there are so many other ways to influence an interviewer!

While a candidate's nonverbal behaviors and characteristics are undeniably important to interview evaluations, they do not comprise the entire picture. There are also certain impacts that the interviewer's nonverbal can have on the interviewee, thereby affecting the candidate's performance and ultimately his or her evaluation. A series of studies by A. Keenan (1975; 1976) found that, by altering an interviewer's degree of head nods, smiling, and eye contact, they could influence both a candidate's performance and his impressions of the interviewer and the organization. As one might expect, an interviewer with more positive nonverbal indicators made the interviewee feel comfortable, and also reassured him that he was performing well. Both of these factors proceeded to result in better performance and higher ratings from third-party judges. The researchers also tried the opposite situation, using interviewers "who gave frequent nonverbal signals indicative of disapproval, [i.e.] frowns, head shaking, and avoidance of eye contact" (Keenan A., 1976). In conclusion, the study indicates that the interviewer truly has quite a large degree of power over whether his interviewee succeeds. One implication of the finding is that interviewees should take great care to give a strong first impression, thereby avoiding the negative "feedback loop" of a disapproving interviewer who negatively affects interviewee performance, which will in turn produce even more disapproval.

This mirroring effect is a particular problem in the "stress interview," a particularly taxing variety of interview in which interviewer(s) enter the interview with the purpose of somehow distressing the candidate to observe his or her response to stress

and adversity. Strategies might include feigned disapproval or indifference, unexpected challenges to responses, particularly tough questions, and other actions designed to "rattle the cage," or evoke an emotional response (Almy, 1978). The stress interview emerged around the 1940s (Freeman, Manson, Katzoff, & Pathman, 1942) and its usage continues today (Stafford, 2011), particularly in potentially higher-stress fields such as finance, law, and business, but also, quite interestingly, in studies of induced hypertension (Slater, Good, & Dimsdale, 1992). The danger here is that more reactive people will be overly affected by the disapproving expressions of their interviewers, thereby indicating an inability to handle a stressful situation. The best strategy for the stress interview is an awareness of the possibility that an especially difficult interview *is* in fact a stress interview, but this scenario nonetheless represents an extreme example of the potential dangers of one's performance relying too heavily on one's interviewer's apparent reactions.

Having considered these results and their myriad implications for interview best practices, one can only conclude that a strong nonverbal performance is as noteworthy as any other facet of the interview. Average-quality content can be augmented heavily by confident, influential nonverbal behaviors, and the impact of an elegant response can be largely muffled by poor posture and inappropriate facial expression. The research shows clearly that checking one's own nonverbal behaviors (and having them critiqued by others) is an integral part of interview preparation that cannot be overlooked. While results on physical attractiveness were predominantly inconclusive, one should nevertheless attempt to put one's best foot forward in terms of grooming, clothing, and (for females) makeup application. The small advantage that good grooming provides

certainly causes no harm, and is miles better than the alternative of appearing sloppy or disinterested. Interviewees would also do well to be aware of the potential for effects of interviewer nonverbals, and avoid being unconsciously and negatively affected by signs of disapproval, most crucially when pitted against the legendary stress interview. Having said that, the fact remains that it is very difficult for most people to consciously engage in nonverbal impression management tactics (Peeters & Lievens, 2006) when instructed to do so. Nonetheless, it is surely beneficial for candidates to realize that nonverbal behavior is clearly a significant, if implicit, component of any comprehensive interview evaluation, and therefore of nearly any employment decision.

# 2.2 - Impacts of Articulative Behaviors

Next in the discussion is an examination of the effects of "articulative" characteristics, or those that deal with the *sound* of speech, as opposed to its content. Because there are far fewer ways to vary this dimension than in the case of nonverbal behavior (speech rate, loudness, pitch and variability are commonly accepted as the main variances in articulation (Zuckerman, Hodgins, & Miyake, 1990)), this section is to be considerably shorter than the previous one. Nonetheless, studies of articulative factors offer a considerable collection of useful recommendations for interview best practices.

One significant set of research was devoted toward discovering whether there are certain qualities that make a human voice more or less attractive. DeGroot & Motowidlo were able to define this empirically, finding that "faster speech rate, less pauses, lower variability in loudness, lower pitch, and higher variability in pitch" was reliably agreed upon as comprising an "attractive voice" (DeGroot & Motowidlo, 1999). High vocal attractiveness was also positively related to better interview evaluations (Motowidlo &

Burnett, 1995) and job performance ratings (DeGroot & Motowidlo, 1999), demonstrating the surprising degree of importance that a pleasant voice can have.

Vocal attractiveness has also been found to have an interaction effect with our false friend, agreeableness, which has the potential to turn it into an asset. DeGroot & Kluemper found that, when vocal attractiveness is low, high agreeableness was strongly negatively related to job performance, whereas a *high* vocal attractiveness condition strongly *reversed* this trend, yielding higher job performance when paired with higher agreeableness (2007). The implications of this are potentially grand for the large amount of aforementioned research which indicates negative results from high agreeableness, suggesting that these researchers may have failed to control for vocal attractiveness. In any case, the findings regarding the qualities comprising an attractive voice provide some useful indications for making one's voice as attractive as possible. Unfortunately for job candidates eager to prepare to the best of their abilities, however, certain researchers have concluded that "speakers have relatively little control over permanent voice quality nor can voice quality be completely suppressed or disguised" (Greene & Mathieson, 1989), meaning that little can usually be done to prepare one's voice for an evaluation.

Furthermore, while findings on the topic are primarily only applicable to men, it is worth noting vocal pitch alterations can be a strong and meaningful articulative factor. A deeper voice has been widely identified as more dominant and attractive (Penton-Voak & Perrett, 2000; Feinberg, Jones, Little, Burt, & Perrett, 2005; DeBruine, et al., 2006; Puts, Gaulin, & Verdolini, Dominance and the evolution of sexual dimorphism in human voice pitch, 2006). When beheld by a female, a highly masculine voice can yield powerful, biologically-rooted feelings of attraction, the intensity of which depends on a

variety of factors including "menstrual cycle, interest in uncommitted sex, involvement in romantic relationships, and exposure to attractive women's faces" (Wolff & Puts, 2010). Obviously, this phenomenon may be mitigated in most cases by the interview context as compared to a social setting, but the female physiological effects of male vocal characteristics should nevertheless be pointed out.

In addition to its effects on women, vocal masculinity also has an even greater impact on impressions of dominance in male-male interactions (Jones, Feinberg, DeBruine, Little, & Vukovic, 2010). Contrary to expectations, which might infer that a more dominant male might pay *less* attention to the dominance indicators of others, results indicate that they are *more* attentive to them, possibly due to their having "achieved their status partly due to elevated attention to dominance and their own status" (Wolff & Puts, 2010). As we know from the shaky voices of nervous or frightened individuals, articulation can also be the window into emotions that one might prefer to hide. Similarly, a study found that "men who perceived themselves to be physically dominant to [another male] lowered their voice pitch when addressing him, whereas men who believed they were less dominant raised their pitch" (Puts, Gaulin, & Verdolini, 2006). When they interact, the high affectivity of male-male relations and the variations in pitch based on self-perceived dominance result in a recurring loop of increasing status asymmetry.

Another prominent theme of articulative behavior research is that of identifying deception. Partially driven by the "staggering" (Clark & Hollinger, 1983) and increasing yearly losses companies face due to employee theft and misconduct, deception research has seen great leaps over the past few decades. While the electronic polygraph test

remains the most reliable and popular way to unveil criminal behavior (Belt & Holden, 1978; Sackett & Decker, 1979), many corporations might prefer a subtler and less accusatory method. Furthermore, studies have suggested that the polygraph is unreliable in the employment interview due to the myriad potential sources of nervousness that may falsely signal deception (Lykken, 1979; Lykken, 1974). Consequently, a more useful course for research, especially for those on the employing/evaluating end of the transaction, is on the involuntary "tells" of deception, particularly as they occur in the employment interview, so that interviewers might be better trained to identify them.

Indeed, the incorrectness of intuitive beliefs about lying suggests that proper training on deception indicators would likely provide a distinct advantage. In one study, a whopping 75% of surveyed individuals in somewhat deception-oriented professions (e.g. police interviewers, customs officers, etc.) professed a belief that an averted gaze indicated lying, when in fact this relationship has been generally disproven (Akehurst, Kohnken, Vrij, & Bull, 1996). This explains why the accuracy rate among such individuals hovers very close to that of pure chance (DePaulo, Stone, & Lassiter, 1985). When trained to focus attention on empirically established signs of deception, however, lie detectors achieved an impressive 70% accuracy rate (deTurck, 1991). The results indicate that accurate training on proven indicators of lies can significantly boost an individual's lie-detecting capabilities. This is further supported by the fact that many specially-trained groups, for example Secret Service members and deception specialists in law enforcement, also reach a respectable 73% accuracy rate (Ekman, O'Sullivan, & Frank, 1999).

In light of the proven effectiveness of training methods, one might think that the full list of deceptive "tells" have been more or less identified. On the contrary, while certain commonalities among liars have been identified, "research has shown that deception itself is not related to a unique pattern of specific behaviors" (Vrij, Edward, Roberts, & Bull, 2000). That said, a few partially reliable indicators have still been put forth. One of these is through the indirect observation of stress. A lying individual is under a great deal more cognitive load than a relaxed, truth-telling person is: he may be worrying about getting caught, or find his mind racing to formulate believable responses that stay consistent with previous lies. The stress of telling lies can be gauged for an indirect indication of deception, e.g. longer delays in speech, slower rates of speech, more speech disturbances and fewer hand movements (Vrij, Edward, Roberts, & Bull, 2000). Consequently, it is these behaviors that can most reliably be used to reveal lies, although one must be aware that they can just as easily signify stress of some other form. Accordingly, the consensus among the foremost experts is that identifying deception through observations of articulative and nonverbal behavior is "a precarious exercise on which people cannot rely" (Vrij, Edward, Roberts, & Bull, 2000). Nevertheless, an awareness of common indicators of deception can still be useful, so as long as it is used appropriately as part of a more holistic evaluation procedure.

A good deal of work has also been done to determine the effects that various foreign or regional accents can have on a job interview. Aside from the impacts of having overtly racist or xenophobic evaluators, there are also demonstrated differences among those who are, at least on a conscious level, not bigoted. A recent study (Deprez-Sims & Morris, 2010) had Ss from the United States evaluate audio of a job candidate speaking

with either a Midwestern US, French, or Colombian accent. As expected, the Midwestern-accented candidate scored the highest, gaining significantly higher scores than the French-accented individual. Interestingly, the Colombian-accented sample fell in the middle of the two other scores, and did not differ significantly from either one. Posthoc process analyses suggested that the variance between Colombian and French accent outcomes was mediated a "similarity-attraction" effect, in which a more familiar accent (Colombian) was treated as preferable to a less familiar one (French). This has been shown not to be a purely American prejudice: a study from this year found that regional German accents (Saxon, Bavarian, and Berlin) caused standard German-speaking individuals to give lower ratings on competence and hireability (Rakić, Steffens, & Mummendey, 2011). Interestingly, the Bayarian accent uniquely yielded a significantly higher rating for socio-intellectual status, indicating that helpful stereotypes may also come into play depending on one's perception of a given region or nation. A sophisticated British accent, for instance, could feasibly prove useful in an American context given its associations with intelligence, poise, and, on the negative side, pretentiousness. There is also evidence that a candidate's name can affect interview judgments: an ethnic (Hispanic) name and ethnic accent both had main effects for less favorable interview evaluations, and also combined to produce a significant interaction effect such that the negative impact of an ethnic name was worsened by the presence of an accent, and vice versa (Purkiss, Perrewé, Gillespie, Mayes, & Ferris, 2006). A similarly worrying study from just five years ago determined that, in reviewing fictitious résumés containing race-typed names and information, white male evaluators gave Asian American individuals high ratings for high-status jobs regardless of résumé quality,

whereas White and Hispanic candidates benefited from strong résumés and Black candidates were rated poorly, even with superior résumés (King, Madera, Hebl, Knight, & Mendoza, 2006). Researchers have suggested that race-based job-status stereotypes are to blame, particularly when white male evaluators are concerned.

On the other end of the spectrum, seemingly supporting the "positive-bias" theory demonstrated in the early Bavarian example, is the body of work on Asian accents. It has been found that "a speaker of Chinese-accented English was treated no differently than a standard American-accented English counterpart was ... in the context of an employment interview," although, for a yet undetermined reason, the accented individual was evaluated more poorly when considered in the context of a college classroom (Cargile, Attitudes toward Chinese-accented speech: An investigation in two contexts, 1997). A more recent study by the same researcher expanded upon these results, finding no differences between evaluations when varying between American and Chinese-accented speech and between an ethnic Chinese name and a standard Anglo-American name in a 2x2 experimental design (2000). At least one author postulates that East Asian accents tend to be "linked with high economic and educational attainments," just as a French accent is considered sophisticated and, in England, a Liverpudlian accent is thought to be uncultured compared to accents from Oxford and Cambridge (Lippi-Green, 1997). The same author grimly concludes that, in general, "accents associated with countries of lower socio-economic status and darker skin colors frequently are denigrated" (Lippi-Green, 1997), though this effect also occurs within nations and races as in the case of "Appalachian [or "Hillbilly"] English" receiving poor ratings from Americans (Atkins, 1993).

Another rarely-studied but interesting instance of positive discrimination is that against disabled individuals. Research has suggested that physically disabled people actually enjoy a "leniency bias, where raters evaluated disabled candidates more positively than equally qualified non-disabled candidates" (Brecher, Bragger, & Kutcher, 2006). While few people are likely to be very upset about a hiring advantage for the physically disabled, this bias is nonetheless important and should be considered in maximizing the fairness of interviews.

Returning to the subject of articulative prejudices, the sad truth seems to be that they have penetrated American society so deeply that even *minority* members tend to display them. Studies have shown that African American and Hispanic evaluators show just as much preference for the standard American accent as do ethnic majority members (Brennan & Brennan, 1981; Deshields, Kara, & Kaynak, 1996). The imposing nature of the dominant culture has even led many to resort to adopting a flexible ethnic identification, choosing to be more or less different from the majority depending on the situation. A group of Latino Americans was found to naturally adjust ethnic display factors including accent and speech content depending on the context, e.g. being "more Latino" to get free drinks at a predominantly Latino bar or "more white" in a job interview or sales situation. The sad truth of cultural suppression in American society is a complex subject deserving of its own paper, but its implications for the job interview context are clear: if a candidate wants the job, he had best be as close to the majority culture as possible. That said, one study presents a possible silver lining on the dark cloud hanging over minority culture: it appears that interviewees have a tendency to mirror their interviewer's accent, even when it is associated with a less sophisticated group

(Willemyns, Gallois, Callan, & Pittam, 1997). This attempt to accommodate and liken oneself to one's interviewer provides a more optimistic outlook for the survival of culture in the workplace, suggesting that the tendency to assimilate with the majority may be mitigated as minority members continue to become more prevalent in traditionally white male-dominated management positions.

Articulative factors continue to have a very strong impact on interpersonal evaluations and the selection interview, perhaps on the same level as nonverbal characteristics of the visual dimension. Their connections with cultural prejudices are certainly noteworthy, and makes clear that there is still much work to be done to minimize adversive, "modern" racism in the employment selection process. In the meantime, however, it seems that vocal assimilation with the majority culture, along with putting forth an attractive and undeceptive voice, is the best practice for increasing the likelihood of a positive employment decision.

#### **CHAPTER 3**

### The Interviewer, the Organization, and other Interviewee-External Characteristics

As the large body of interview research has amply demonstrated, there exists a very complex web of interacting factors within the employment interview. One might take solace in the fact that many of these within-interview qualities, for example a candidate's posture, voice, and demeanor, are controllable to a certain degree. Unfortunately, there is also a wide variety of external factors at play, many of which are outside most candidates' span of control. The outside-interview characteristics with which this section will be concerned are those of interviewer differences and organizational conditions. While little can be done to alter these influences on the candidate's side, studies into them are nonetheless useful as the basis for finding best practices for an optimally fair and standardized interview process.

One main reason why the employment interview has been questioned so frequently is its poor interrater reliability. Given the highly interpersonal and subjective nature of the process, this is no surprise: one interviewer might get along swimmingly with a candidate, whereas another might find him unspectacular. There are also a slew of interviewer-specific characteristics that function much like those of subject characteristics in the psychological experimentation process: despite all of a facilitator's best attempts to standardize and control the interview's variables, the personal qualities of the interviewer will inevitably affect his or her behavior, interactions, and evaluations in *some* way. Further reducing interview reliability is the fact that some of the rare

qualities that interviewers *do* have in common with one another are nonetheless detrimental to the interview's reliability. Tactics for mitigating or navigating these evaluator-rooted problems will be examined in a later section, but first these confounds will be laid out and evaluated for severity of effect.

Naturally, the most central facet of an analysis of interviewer-side dynamics is that of the interviewer's actual cognitive decision-making process. While this obviously varies between individuals, studies on widely systemic and generalizable phenomenon abound, allowing us to reach various conclusions about interviewers as a group. One demonstrably important difference between interviewers comes in their differing levels of experience. Depending on the size and type of organization, interviewers may be HR professionals, relatively new recruits, or seasoned veterans. The effects of different levels of experience have been explored in a series of studies. Russell, Perkins and Grinnell (2008), for example, discovered a positive correlation between interviewer age and number of positive hiring decisions when comparing the decisions of adult professionals with those of college students. A similar study corroborated these results, finding significantly more stringent ratings from older evaluators vs. their student counterparts (Gilmore, Beehr, & Love, 1986). Encouragingly, more experienced interviews have been shown not only to be more demanding, but also to demonstrate higher interrater reliability, achieving very high consistency both in rank-order ratings of candidates and percentage of candidates accepted, despite varying subscores (Rowe, 1960). Presumably, this high level of reliability indicates a higher level of accuracy as well, which in turn would suggest that interviewers truly do get better with practice.

On the other hand, more interview experience does *not* seem to grant evaluators any significant immunity against aforementioned tactics of "impression management," or an interviewee's conscious attempt to manipulate his evaluator's sentiments through behavioral modification. Despite years of experience, advanced, professional interviewers were still not significantly more sensitive to impression management tactics than were untrained psychology students (Lievens & Peeters, 2008). That said, it is nonetheless prudent to conclude that experience and accuracy have some degree of correlation, though assignment of *causation* might be premature since more successful hiring professionals may simply stay in the industry longer, whereas those with lesser abilities may switch careers.

Another rarely explored but interesting mediating factor presented by different kinds of interviewers is based on an interviewer's inherent "affectivity," or mood. It is obvious and intuitive that a happy interviewer is more likely to give a hiring offer, but Chen, Yang, and Lin (2010) were able to specifically identify the mechanics of this tendency, finding that an evaluator with high positive affectivity is more susceptible to impression management (IM) techniques of all kinds, whereas the ratings of one with negative affectivity are *negatively* related with IM tactics. The study therefore presents an empirical basis for yet another potential influence that companies should attempt to standardize, and that (in the mean time) candidates should exploit.

Considerations of the different categories of interviewers force one to think about the other inconsistencies that exist between them, for instance with regards to their personal hiring criteria. Research on the topic is scarce, but intuition would suggest that these distinct groups may also operate upon different implicit priorities in addition to the explicit goal of "finding the best man for the job." Higher-level managers, for example, may be inclined to select candidates who will be obedient and easy to manage, whereas potential teammates may be more focused on a candidate's personability and teamwork experience. Additional research on differential employment interview goals between groups would likely be fruitful, and may possibly build the theoretical foundation for further standardization of employment selection processes.

As far as the general criteria and cognitive processes across interviewer types, however, existing research is actually very informative. One very alarming statistic comes from a study by Springbett (1958), which found that interviewers reach a mostly firm decision an average of just four minutes after the interview has begun. Thus, first impressions are demonstrably just as important as conventional wisdom has indicated. As for the process by which these evaluations are reached, interviewers in at least three influential studies (Sydiaha, 1959; 1961; Bolster & Springbett, 1961) have been found to predominantly use a stereotype-comparison model, judging candidates against positive prototypes of "idealized successful applicants" to determine quality and hireability. The catch, however, is that these prototypes are in general very poorly defined, such that interviewers are commonly unable to satisfactorily explain why a selected candidate would make a good employee (Hollmann, 1972). In addition to supporting the theory that subtle, unexplainable factors are a powerful determinant of interview evaluations, this finding also reveals that interviewers are largely far more comfortable operationalizing negative concepts than positive ones. In contrast with the Hollmann (1972) experiment's subjects' difficulty with explaining why they liked the candidates they chose, they had a very easy time explaining what they did not like about those whom they rejected. A study

by Carlson and Mayfield (1967) supports these results, finding that interrater reliability in the study was "significantly greater for unfavorable than favorable applicants; managers reacted more strongly to negative information and tended to agree with each other more in this are."

The best guess for the reason behind this peculiar orientation (people in general are better at handling *positive* information) is that "interviewers only receive feedback ... about bad employees and consequently learn to utilize negative information more appropriately" (Webster, 1964). Schmitt (1976) summarizes the situation well, characterizing the selection interview as "primarily a search for negative information, as indicated by the finding that just one unfavorable rating (trait) resulted in a reject decision in 90% of the cases." This theory is further bolstered by findings (Anderson, 1960) that, with all other factors held equal, an initial positive impression will usually result in an interviewer talking for longer, probing for further details and reasons not to hire (Farr, 1973). One hypothesis is that this occurrence is either due to an attempt to "sell [the candidate] on the company or to gather information to confirm his decision" (Schmitt, 1976). While the destructive power of a single crucial negative point should not come as a surprise, this collection of findings certainly establishes just how decisive such a factor can be, as well as the extent to which interviewers are wont to seek out and remember negative information. In any case, one should note that these confounding effects can often be partially softened by an interviewer taking, and reviewing, written notes during the interaction, which has been shown to result in increased judgment accuracy (Middendorf & Macan, 2002).

An alternative view of hiring criteria accepts the stereotype-comparison model, but contends that interviews do have a fairly strong concept of desirable qualities, since an interviewer's ideal candidate is actually closely modeled off of the interviewer himself. The "similar-to-me effect" (Sears & Rowe, 2003) is a pervasive one, with demonstrated positive correlations for ratings with similarity of attitudes (Baskett, 1973: Griffitt & Jackson, 1970; Peters & Terborg, 1975), biographical background (Rand & Wexley, 1975), conscientiousness (Sears & Rowe, 2003), and race (Lin, Dobbins, & Farh, 1992). In general, one researcher concludes that "it has been a consistent finding that high evaluation of a job candidate bears a positive relationship to the degree of perceived similarity of that applicant to the rater (Rand & Wexley, 1975). There are a number of ideas about the reason for this phenomenon. Cahn postulates that the "theory of self-validation" is at play (Cahn, 1976), meaning that high interview ratings stem most strongly from feelings of validation on the interviewer's part. That is, the interviewer's experience of having his own sentiments and biographical details mirrored by the candidate imbues him with pleasant feelings of interpersonal acceptance and likeness; his feelings and experiences are validated by their existence in another person. Said pleasant feelings are consequently associated with the candidate, and also predispose the interviewer to give the candidate significantly better ratings. Moreover, the similarity effect has been shown to live on past the conclusion of the interview. Assuming that an individual with attitudinal differences does, against odds, receive a job offer, one study has shown that the candidate will likely receive a lower salary recommendation than would an attitudinally similar one (Baskett, 1973). Finally, a weaker but nonetheless significant similarity benefit appears with regards to gender: for women only, having a same-sex interview pairing resulted in "greater openness" from both involved parties (Fletcher & Spencer, 1984), presumably producing a more informative and comprehensive interview. Finally, along the lines of the prior discussion of racial prejudice, this similarity effect has serious implications for interracial and intercultural interview pairings versus within-race setups. Coming from a different background from one's interviewer will often entail a loss of the "similar-to-me" effect, meaning that other-culture interviewees may face a systemic disadvantage as compared to same-culture individuals. The power of these similarity effects is certainly something about which interviewers should be aware, so that undue "bonus points" are not assigned simply because a candidate was fortunate enough to be matched with an attitudinally similar interviewer. Furthermore, interviewers should take care not to let discussion topics stray too far into the content of personal attitudes or biographical background, lest they impact interpretations and evaluations through either similarity or dissimilarity.

In addition to interviewer-related conditions, a candidate is also prone to find himself up against a variety of organizational realities that may help or hinder his or her chances at employment. One such condition, with strong implications for optimizing hiring practices, centers on the status of hiring quotas. When made aware (but not pressured to conform to) of the quota statuses, interviewers offered significantly more hiring offers when behind in recruiting than when they were ahead (Carlson R., 1968). This logical but distinctly unfair reality could have serious consequences for the reliability of the interview, giving a distinct advantage to interviewees who appear earlier in the process or at crucial troughs in the hiring process. One simple mitigation method

would be to keep hiring quotas unknown to interview evaluators, although the practicality of this tactic in terms of actually *meeting* hiring needs may limit its applicability.

Organizations also make certain noteworthy impacts on their candidates through their choices as to what kind of interview to use. Aside from the obvious ramifications of varying interview style and content when choosing between, for instance, behavioral descriptive or situational interviews (outlined in an earlier section), experiments have shown that there are also some unintended impacts on interviewees. Most significantly, variations in interview type tend to result naturally in variations in verbal and nonverbal impression management techniques on the candidates' part. The behavioral descriptive method was shown to trigger "self-focused (and defensive) tactics," whereas situational interviews "triggered other-focused tactics" (Peeters & Lievens, 2006). As discussed in this paper's Historical Review section, self-focused tactics have been determined to be superior in most cases, indicating that candidates facing situational interviews would be well advised to make conscious use of more self-focused tactics, thereby differentiating themselves from competitors who, presumably, will tend to rely on less effective otherfocused methods. On the employer's side, this finding reinforces the presumably wellknown importance of keeping interview type consistent between candidates.

Naturally, organizational and interviewer-related conditions also have significant impacts on the *other* side of the interaction. That is, they have been shown not only to affect the candidate's performance and consequent hiring decision, but also the candidate's view of the company in question and, therefore, his likelihood of accepting an offer of employment. The effects of these conditions on a hiring manager's "yield" (an extremely important statistic determining a company's desirability) can result in palpable

results for a company's bottom line, and as such should be treated with their deserved importance. In a 1991 study, probing discussions with graduating college seniors revealed that "[subjects] interpreted recruitment experiences ... as symbolic of broader organizational characteristics" (Rynes, Bretz, & Gerhart). Problems in the interview process, such as recruitment delays, unpleasant or unappealing interviewers, or gender inequalities amidst the visible body of practitioners were all identified as factors determining a candidate's view of the company as a whole. Appearances and conditions during the recruitment process, therefore, should be considered to be of paramount importance for a company's talent attraction efforts. More specific to the interview itself, Keenan and Wedderburn's study (1975) determined that candidates formed a much more favorable impression of interviewers who in turn displayed high levels of nonverbals indicating approval, with less favorable feelings for those displaying disapproving nonverbals. To a certain extent, this phenomenon takes care of itself: a high-performing candidate is more likely to gain his evaluator's approval, which in turn ought to produce an employment offer as well as a more favorable candidate impression of his interviewer, which theoretically leads to the acceptance of said offer. Nonetheless, it would serve companies well to ensure that their interviewers consciously attempt to engage in approving nonverbals wherever possible, increasing the likelihood that even lowperforming candidates will depart with positive sentiments toward the company, thereby bolstering its reputation and desirability. It has also been noted, quite intuitively, that a student's approval criteria is positively related to his grade-point average. In other words, students with a theoretically greater variety of employment opportunities are pickier in evaluating recruitment experiences (Rynes, Bretz, & Gerhart, 1991). To conclude, this

collection of studies exemplifies the need for employers to carefully control their recruitment operations to optimize the response from current and future candidates.

### **CHAPTER 4:**

## Conclusions, Recommendations, and Areas for Further Research

# 4.1 - For the Employer

All in all, it may seem that the preceding groups of studies demonstrate the manipulability and formulaic nature of interpersonal evaluations, hinting at the tempting, but oversimplified, conclusion that the human mind is somehow unreliable and easily fooled. Amidst all this discussion of covert influences, it is easy to forget that, ultimately, people are still highly attuned to interpersonal interactions and will, in most cases, make a fairly good decision about the best man or woman for the job based on "job-related competencies" much more than on feelings and impressions (Lievens & Peeters, 2008). Nonetheless, these psychological influences obviously must not be ignored. But any useful analysis of confounding phenomena must be accompanied by recommendations concerning what to do to lessen their impact. In addition to the specific, relatively selfevident prescriptions which can be found alongside the descriptions of the phenomena which they concern, there are also general actions that can be taken by those in charge of the process (employers) to systemically reduce the undesirable destandardizing influences which we have identified. Simply put, this section will focus on determining what practical steps employers can take to increase reliability.

One possibility, which seems to be the most widely-accepted expert consensus at this time, is that a higher degree of interview "structure" is the most reliable way to reduce bias and maximize fairness. An interview's degree of structure can be operationalized in any number of ways, but can be generally described as incorporating more control, a wider array of guidelines, and, most pivotally, as much consistency between interviews as possible. The ideal structured interview functions much like a scientific experiment, with all factors held equal except for the single "dependent variable" of interviewee responses. There is a variety of ways to accomplish this high degree of standardization, but most studies point back to Campion et al.'s definitive set of fifteen research-based guidelines (1997), which include such directives as "Ask Exact Same Questions of Each Candidate," "Limit Prompting, Follow-up Questioning, and Elaboration on Questions," and "Rate Each Answer or Use Multiple Scales." Campion et al. put forth an impressive set of structural dimensions, each accompanied by an average of four "levels" of application, to be varied according to an employer's specifications. For example, the "Ask Exact Same Questions of Each Candidate" criterion presents levels across a wide practical range of flexibility, going from pure faithfulness to a predetermined script to a structureless, free-form conversation, with intermediate levels that make use of varying degrees of question-posing guidance for interviewers.

As useful as its recommendations are, the flexibility of this model is an even more vital point in its favor: as one analyst notes, the "essential character" of the interview is the "dynamic interaction between two people" (Yonge, 1956), and an uncompromisingly structured approach to the interview could potentially snuff out the revelatory effects of its conversational nature. In industries with more teamwork and/or client interactions, a more organic, if less reliable, interview process may have the strongest implications for actual job performance. Future research will be most useful if it attempts to differentiate between industries when considering the best-case applicability of findings.

Stronger structure has also been linked to decreased interviewer susceptibility to impression management tactics (Peeters & Lievens, 2006; Tsai, Chen, & Chiu, 2005; Lievens & Peeters, 2008), meaning that candidates can theoretically be evaluated more for truly relevant characteristics and job suitability rather than their abilities to manipulate another's impression of them. Again, while the findings are interesting, employers should take careful consideration before indiscriminately applying them. A candidate with strong impression management capabilities is likely to carry these over into his daily work, which can be an asset in more impression-centric fields, for instance marketing or customer relations. On the other hand, when we consider findings that a *longer* interview (as per one of Campion et al.'s fifteen recommendations) also has mitigating effects on the effects of impression management tactics (Tsai, Chen, & Chiu, 2005), indicating that the skill may have limited applicability in longer interactions, such as those that might be found in a work environment. As such, we can conclude that decreasing the confounding effects of IM with increased structure is very likely a good move.

Lastly, it has been concluded that structured interviews will tend to reduce bias in general, thereby yielding higher reliability and validity (Baker & Spier, 1990). This is partly thanks to a mitigation of the previously discussed "similar-to-me" effect due to greater limitations on inclusion of biographical and attitudinal information. That is, a less-structured interview "affords the opportunity for candidates to share favourable information not expressly requested by the interviewer, while more rigorous formats (the SI) force raters to make evaluations on the basis of whether a response corresponds to a predetermined benchmark" (Lin, Dobbins, & Farh, 1992). Another bias-reducing factor comes in the tendency of structured interviews to limit the impact of either party's

personal affect by instilling a more mechanical and standardized process without as much room for emotional differences (Dipboye & Gaugler, 1993). Lastly, through a yet-undetermined mechanism, more structure has even been shown to decrease the aforementioned "leniency bias" which grants physically disabled candidates an advantage in the hiring process (Brecher, Bragger, & Kutcher, 2006). All in all, the benefits of structured interviews are well-supported and considerable in scope. By making judicious and personalized use of Campion et al.'s research on the dimensions of structuredness, employers of all kinds should be able to reach their optimal conditions for standardization while maintaining appropriate levels of freedom in order to inform decision-making.

There is one other interview type worth mentioning, although it enjoys far less support and research than the general structured interview. This is the "puzzle interview," popularized by Microsoft's hiring team in the 1990s and containing thought puzzles designed to test the candidate's cognitive abilities and creative flair. Sample questions might include "Why are manhole covers round?" or "How would you weigh an airplane without a scale?" (Honer, Wright, & Sablynski, 2007). The puzzle interview has found some success today as a component of the interview process in the competitive field of management consulting, wherein candidates will be asked to logically tackle seemingly insurmountable questions, for example "how many tennis balls would fit in the Grand Canyon?" Performance in puzzle interviews has been found to be significantly correlated with cognitive ability, and also to have relatively high interrater reliability given the interview's standardized nature (Honer, Wright, & Sablynski, 2007). Of course, not all employers truly require that successful candidates think in such a specific and out-of-the-box manner, and hiring individuals based *solely* on a puzzle interview would neglect far

too many other characteristics. Despite its limited applicability, however, the puzzle interview remains a valid, reliable measure of cognitive ability and should be implemented in appropriate industries alongside other, more person-centric interview methods.

Considering the magnitude and comprehensiveness of all of the widely-available research in previous sections, one can rest assured that the most driven interviewees will do their best to internalize research findings and optimize their performance. Given the rough employment climate in recent years, it is not surprising that the "interview coaching" industry has expanded so rapidly. A simple Google search for the term yields over 4 million results, many of which are for-profit businesses offering a variety of interview coaching services, including one-on-one practice with professional critique, seminars on best practices, and, graciously, free basic tips on the businesses' homepages. With such wide accessibility to coaching services that theoretically bring one's impression management skills to a new level. We have established that a higher degree of structure can mitigate the effects of this, but it nevertheless behooves employers to be aware of the potential discrepancies between a coached interviewee and an uncoached one, Maurer, Solamon, Andrews and Troxtel (2001) were able to show that "coaching ... [was] positively associated with a tendency to use ... strategies in the interview that enhanced the organization of interviewees' answers, and this organization was positively associated with performance in the interview." In contrast, Riggio and Throckmorton (1988) concluded that "there were no significant effects for training on interview performance." Lastly, a third study found that interview coaching not only improved interview performance, but also yielded higher *validity* in a structured interview (Maurer,

Solamon, & Lippstreu, 2008), meaning that they are more predictive of actual job performance and desirability as an employee. The mechanism by which this occurs, as hypothesized by the researchers, is that uncoached interviewees actually tend not to convey an accurate portrayal of their job capabilities, due to factors such as nerves or inability to effectively respond to a prompt. The problem, say the researchers, is that individuals may be good at their work but bad at interviewing. Coaching, then, actually removes the confounding variable of interview skill. In the researcher's words, coaching "direct[s] attention by the interviewee to that content which is most relevant to what the interviewer seeks, and enable[s] them to clearly convey the types of information sought... [thereby] improving the psychometric quality of scores produced" (Maurer, Solamon, & Lippstreu, 2008). Confidence and clarity are also improved. In this way, evaluators ought to be able to more accurately recognize both good and bad candidates, unaffected by the uneven playing field of interview prowess. Numerous companies have already incorporated this finding, such as through the tendency of selective consulting firms like Bain to host pre-interview briefing nights, in which candidates are taught about interview strategies in order to better prepare. While cost and efficiency are an obvious concern, it seems that a wider implementation of a similar coaching system could be very valuable, as well as *fair* if all candidates are given a cost-free opportunity to participate. In the meantime, it appears that employers should not worry about coached candidates, since the main effect seems to be one of increased validity.

# **4.2 - For the Interviewee**

Since the findings in the nonverbal and articulative sections above are directly related to interviewee recommendations (i.e. interviewees should do what has been found to increase hireability and avoid those behaviors that do not), this section will not reiterate the findings. Instead, see the next page for an easily referenced summary table, describing industry-nonspecific best practices for an interviewee.

SUMMARY OF RESEARCH ON INTERVIEWEE BEHAVIOR BEST PRACTICES		
FEATURE	BEST PRACTICES	NOTES
Eye Contact	Eyes should mainly be in contact, with some intermittence to prevent discomfort from excess. Decrease slightly with increased physical proximity from the interviewer, and vice versa.	Biologically, eye contact's function is to keep sensations of interpersonal distance in equilibrium.
Handshake	Firm, dry, and of natural length. A well-practiced handshake is especially vital for males.	
Demeanor	Not overly agreeable or ingratiating. Confidence and focus on oneself is more powerful and commanding of positive regard.	This varies somewhat depending on the nature of the job in question. A strong interpersonal interactions requirement makes the job more conducive to a slightly more agreeable demeanor in the interview.
Conversational Focus	Focus on yourself. Interest in the other party is good for regular conversations, but counterproductive in the interview. Other-focused questions at the end can be used as a supplement to positive regard after efficacy has been established.	
Physical	Be well-groomed. Physical attractiveness brings a small but significant positive bias,	
Appearance	though it is far from the most important characteristic when compared to social performance and work experience. Attractiveness increases the effectiveness of impression management tactics. Females should wear some makeup.  Note that same-sex interviews have shown a <i>negative</i> bias against attractiveness. To mitigate this, lessen signs of dominance in case of a same-sex interview.	
Interviewer's	Avoid being too affected by signs of an interviewer's disapproval. This will likely result in	
Nonverbal	poorer performance and increased subsequent disapproval. Do not allow yourself to be	
Behaviors	discouraged - avoid the disapproval "feedback loop." Also, consider the possibility that you are in a "stress interview" designed to test your responses to constant disapproval.	
Speech	For both genders, "faster speech rate, less pauses, lower variability in loudness, lower pitch, and higher variability in pitch" has been determined to be "attractive." Enunciate words well and do not rush. Deepness of pitch is very effective for males, and can have powerful effects on attracting women.	Vocal quality is very difficult to reliably and permanently change.
Accents	Sadly, when considering effects on hireability in isolation, one should work to decrease foreign accents in general, particularly when the accent is associated with "countries of lower socio-economic status and darker skin colors." This is not to say that this is the <i>right</i> thing to do by any means, only that it is the approach most likely to yield a job offer due to the subconsciously ingrained racism of American society, and due to "similar-to-me" preferences.	
Disabilities	Physical disabilities actually prove to be helpful. One should not be able to manipulate this, but candidates should not necessarily feel it is best to cancel an interview if one is temporarily incapacitated in a wheelchair or cast.	

## 4.3 - Directions for Further Research

The work that has been done in the field of interview psychology is comprehensive in many ways, but would nevertheless benefit from improvement and expansion, so that the process can continue its evolution toward maximal validity and reliability. One significant development area is that of industry-differentiated analyses. The vast majority of research today is undertaken for as general an application as possible, typically leaving industry context and job type as an insignificant afterthought. Admittedly, due to their strong foundations in the science of interpersonal interactions, many of these studies' findings truly *are* applicable to any industry or job, and probably will not show significant changes in efficacy when these factors are held as independent variables. Nonetheless, researchers should pay attention to the need to empirically *establish* this wide applicability, so that we can know for sure whether behavioral best practices differ significantly for a marketing associate versus a city planner.

Another potentially interesting point of differentiation would be among different levels of experience, and the different sets of preferred behaviors that they may bring. For practical and logistical reasons, a preponderance of existing research has been done using college students as subjects and/or confederates, presumably meaning that most experiments are working under the implicit assumption (or, sometimes, explicit explanation) that they are concerning candidates for entry-level positions. Therefore, future studies should attempt to test for interactive effects between age/experience level and behaviors. One might hypothesize that a more experienced individual might reap more reward from dominant nonverbal behaviors than would a novice, since they may be viewed as having "earned" the use of said behaviors. Interactions between an

interviewer's experience level and that of the interviewee could also be interesting, such as through the possibility of younger practitioners feeling more affinity with young candidates, or granting higher ratings to older candidates based on societally-instilled respect for one's elders.

A third and final area ripe for exploration pertains to the characteristics of an ideal interviewer. As we have seen, there has been a great deal of insight into the best ways for an interviewee to behave, and also into how organizations can modify the interview process to increase its quality, but there is an informational gap when it comes to interviewee *selection*. Public information on organizations' status quos for evaluator selection is scarce, but one would presume that the process would be more contingent, in most cases, on availability and interest than best fit. Researchers would do well to recognize interviewer characteristics as having great potential for reliability augmentations, for instance in eliminating more verifiably biased individuals from contention as an interviewer. By establishing a research-backed set of criteria for interviewee selection, researchers should be able to further increase interview reliability.

To conclude, it seems certain that the employment interview will continue to constitute a vital part of the American career world. While it may be flawed, it remains a fairly good predictor of job suitability, at the very least, a sound indicator of whether a candidate will make a good social fit with an organization. The ugly side of biases, exemplified by the aversive bigotry and xenophobia that has been consistently demonstrated by studies, is the one saddening aspect of the analysis, due to the fact that nothing short of widespread societal change will allow for a widespread improvement.

With the exception of these unsavory racist vestiges, interviewer and interviewee alike should take heed of the findings presented in this review, and modify behavior and process accordingly so that the playing field of the employment interview can be continually evened out, and so that interpersonal interactions in general can be more adeptly navigated.

### References

- Abercrombie, K. (1968). Paralanguage. British Journal of Disorders of Communications, 3, 55-59.
- Agthe, M., Spörrle, M., & Maner, J. K. (2011). Does Being Attractive Always Help? Positive and Negative Effects of Attractiveness on Social Decision Making? *Personality and Social Psychology Bulletin*, 20(10), 1-13.
- Akehurst, L., Kohnken, G., Vrij, A., & Bull, R. (1996). Lay persons' and police officers' beliefs regarding deceptive behavior. *Applied Cognitive Psychology*, 10, 461-473.
- Almy, T. P. (1978). The stress interview: Unfinished business. Journal of Human Stress, 4(4), 3-8.
- Anderson, C. (1960). The relation between speaking times and decision in the employment interview. *Journal of Applied Psychology*, 44, 267-268.
- Andreoli, N. A. (2009). Perceptions of female physical attractiveness and its influence on selection procedures. *Dissertation Abstracts International*, 4467.
- Argyle, M. (1972). Non-verbal communication in human social interaction. In R. Hinde, *Non-verbal Communication*. Cambridge: Cambridge University Press.
- Argyle, M., & Dean, J. (1965). Eye contact, distance and affiliation. Sociometry, 28, 289-304.
- Atkins, C. P. (1993). Do employment recruiters discriminate on the basis of nonstandard dialect? Journal of Employment Counseling, 30, 108-118.
- Baker, H., & Spier, M. (1990). The employment interview: Guaranteed improvement in reliability. *Public Personnel Management*, 19(1), 85-90.
- Barbee, J., & Keil, E. (1973). Experimental techniques of job interview training for the disadvantaged: Videotape feedback, behavior modification, and microcounseling. *Journal of Applied Psychology*, 58, 209-213.
- Baskett, G. (1973). Interview decisions as determined by competency and attitude similarity. Journal of Applied Psychology , 57(3), 343-345.
- Belt, J., & Holden, P. (1978). Polygraph usage among major U.S. corporations. *Personnel Journal* , 57, 80-86.

- Bialik, C. (2010, September 4). Seven Careers in a Lifetime? Think Twice, Researchers Say.

  Retrieved October 18, 2011, from The Wall Street Journal:

  http://online.wsj.com/article/SB10001424052748704206804575468162805877990.htm

  I
- Bolster, B. I., & Springbett, B. M. (1961). The reaction of interviewers to favorable and unfavorable information. *Journal of Applied Psychology*, 45, 97-103.
- Brecher, E., Bragger, J., & Kutcher, E. (2006). The Structured Interview: Reducing Biases Toward Job Applicants with Physicl Disabilities. *Employee Responsibilities and Rights Journal*, 18(3), 155-170.
- Brennan, E. M., & Brennan, J. S. (1981). Accent scaling and language attitudes: reactions to Mexican American English speech. *Language and Speech*, 24, 207-221.
- Burgoon, J. K., Manusov, V., Mineo, P., & Hale, J. L. (1985). Effects of gaze on hiring, credibility, attraction and relational message interpretation. *Journal of Nonverbal Behavior*, 9(3), 133-146.
- Buttner, E. H., & McEnalle, M. (1996). The interactive effect of influence tactic, applicant gender, and type of job on hiring recommendations. *Sex Roles* , 34, 581-591.
- Cahn, D. (1976). The employment interview: A self-validation model. *Journal of Employment Counseling*, 13(4), 150-155.
- Cameron, D. (1999). Better conversations: A morality play in twelve tapes. *Feminism & Psychology*, 9(3), 315-333.
- Cargile, A. C. (1997). Attitudes toward Chinese-accented speech: An investigation in two contexts. *Journal of Language and Social Psychology*, 16(4), 434-443.
- Cargile, A. C. (2000). Evaluations of employment suitability: Does accent always matter? *Journal of Employment Counseling*, 37(3), 165-177.
- Carlson, R. E., & Mayfield, E. C. (1967). Evaluating Interview and Employment Application Data. *Personnel Psychology*, 20, 441-460.
- Carlson, R. (1968). Employment Decisions: Effect of MOde of Applicant Presentation on Some Outcome Measures. *Personnel Psychology*, 29, 193-207.
- Chen, C.-C., Yang, I. W.-F., & Lin, W.-C. (2010). Applicant impression management in job interview: The moderating role of interviewer affectivity. *Journal of Occupational and Organizational Psychology*, 83(3), 739-757.

- Clark, J., & Hollinger, R. (1983). *Theft by employees in work organizations: Executive Summary.*Washington, D.C.: National Institute of Justice.
- DeBruine, L., Jones, B., Little, A., Boothroyd, L., Perrett, D., Penton-Voak, I., et al. (2006).

  Correlated preferences for facial masculinity and ideal or actual partner's masculinity.

  Proceedings fo the Royal Society B: Biological Sciences, 273, 1355-1360.
- DeGroot, T., & Kluemper, D. (2007). Evidence of Predictive and Incremental Validity of Personality Factors, Vocal Attractiveness and the Situational Interview. *International Journal of Selection and Assessment*, 15(1), 30-39.
- DeGroot, T., & Motowidlo, S. J. (1999). Why visual and vocal interview cues can affect interviewers' judgments and predict job performance. *Journal of Applied Psychology*, 84, 986-993.
- DePaulo, B., Stone, J., & Lassiter, G. (1985). Deceiving and detecting deceit. In B. Schenkler, *The self and social life* (pp. 323-370). New York: McGraw-Hill.
- Deprez-Sims, A.-S., & Morris, S. B. (2010). Accents in the workplace: Their effects during a job interview. *International Journal of Psychology*, 45(6), 417-426.
- Deshields, O., Kara, A., & Kaynak, E. (1996). Source effects in purchase decisions: the impact of physical attractiveness and accent of salesperson. *International Journal of Research in Marketing*, 13, 89-101.
- deTurck, M. A. (1991). Training observers to detect spontaneous deception: Effects of gender. *Communication Reports*, 4, 81-89.
- Dipboye, R. L., & Gaugler, B. B. (1993). Cognitive and behavioral processes in the selection interview. In N. Schmitt, & W. Borman, *Personal selection in organizations* (pp. 135-170). San Francisco: Jossey-Bass.
- Dougherty, T., Ebert, R., & Callender, J. (1986). Policy capturing in the employment interview. Journal of Applied Psychology, 71, 9-15.
- Downs, C. (1969). Perceptions of the selection interview. Personnel Administration, 22, 8-23.
- Ekman, P., & Friesen, W. V. (1969). The Repertoire of Nonverbal Behavior: Categories, Origins, Usage, and Coding. *Semiotica*, 1(1), 49-98.
- Ekman, P., O'Sullivan, M., & Frank, M. (1999). A few can catch a liar. *Psychological Science*, 10, 263-266.
- Farr, J. L. (1973). Response requirements and primacy-recency effects in a simulated selection interview. *Journal of Applied Psychology*, 57, 228-233.

- Feinberg, D., Jones, B., Little, A., Burt, D., & Perrett, D. (2005). Manipulations of fundamental and formant frequencies affect the attractiveness of human male voices. *Animal Behavior*, 69, 561-568.
- Fletcher, C., & Spencer, A. (1984). Sex of candidate and sex of interviewer as determinants of self-presentation orientation in interviews: An experimental study. *International Review of Applied Psychology*, 33(3), 305-313.
- Forbes, R. J., & Jackson, P. R. (1980). Non-verbal behaviour and the outcome of selection interviews. *Journal of Occupational Psychology*, 53, 65-72.
- Frank, L., & Hackman, R. (1975). Effects of interviewer-interviewee similarity on interviewer objectivity in college admissions interviews. *Journal of Applied Psychology*, 60(3), 356-360.
- Freeman, G. L., Manson, G. E., Katzoff, E. T., & Pathman, J. H. (1942). The stress interview. *The Journal of Abnormal and Social Psychology*, 37(4), 427-447.
- Gilmore, D. C., Beehr, T. A., & Love, K. G. (1986). Effects of applicant sex, applicant physical attractiveness, type of rater and type of job on interview decisions. *Journal of Occupational Psychology*, 59(2), 103-109.
- Greene, M., & Mathieson, L. (1989). The voice and its disorders. London: Whurr.
- Greenwald, M. A. (1981). The effects of physical attractiveness, experience, and social performance on employer decision-making in job interviews. *Behavioral Counseling Quarterly*, 1(4), 275-287.
- Greg W. Marshall, M. B. (1998). Preinterview Biases: The Impact of Race, Physical Attractiveness, and Sales Job Type on Preinterview Impressions of Sales Job Applicants. *Journal of Personal Selling & Sales Management*, 18(4), 21-38.
- Griffitt, W., & Jackson, T. (1970). Influence of information about ability and non-ability on personnel selection decisions. *Psychological Reports*, 27, 959-962.
- Helminen, T. M., Kaasinen, S. M., & Hietanen, J. K. (2011). Eye contact and arousal: The effects of stimulus duration. *Biological Psychology*, 88(1), 124-130.
- Hollandsworth, J. G., Kazelskis, R., Stevens, J., & Dressel, M. E. (1979). Relative Contributions of Verbal, Articulative, and Nonverbal Communication to Employment Decisions in the Job Interview Setting. *University of Southern Mississippi Journal of Personnel Psychology*, 32, 359-367.
- Hollmann, T. D. (1972). Employment interviewers' errors in processing positive and negative information. *Journal of Applied Psychology*, 56, 130-134.

- Honer, J., Wright, C. W., & Sablynski, C. J. (2007). Puzzle interviews: What are they and what do they measure? *Applied H.R.M. Research*, 11(2), 79-96.
- Huffcutt, A. I., & Culbertson, S. S. (2011). Interviews. In S. Zedeck, APA Handbook of Industrial and Organizational Psychology (pp. 185-203). Washington DC: American Psychological Association.
- Hurtig, R., Ensrud, S., & Tomblin, J. B. (1982). The communicative function of question production in autistic children. *Journal of Autism and Developmental Disorders*, 12(1), 57-69.
- Iddekinge, C. V., McFarland, L., & Raymark, P. (2007). Antecedents of Impression Management Use and Effectiveness in a Structured Interview. *Journal of Management*, 33(5), 752-773.
- Interview, A. R. (1997). Michael A. Campion; David K. Palmer; James E. Campion. *Personnel Psychology*, 50, 655-702.
- Jones, B., Feinberg, D., DeBruine, L., Little, A., & Vukovic, J. (2010). A domain-specific opposite-sex bias in human preferenecs for manipulated voice pitch. *Animal Behavior*, 79, 57-62.
- Judge, T. A., Higgins, C. A., & Thoresen, C. J. (1999). The Big Five personality traits, general mental ability, and career success across the life span. *Personnel Psychology*, 52, 621-652.
- Kacmar, K. M., Delery, J. E., & Ferris, G. R. (1992). Differential Effectiveness of Applicant Impression Management Tactics on Employment Interview Decisions. *Journal of Applied Social Psychology*, 22(16), 1250-1272.
- Kanazawa, K. (2004). Why beautiful people are more intelligent. Intelligence, 32, 227-243.
- Keenan, A. (1976). Effects of the non-verbal behaviour of interviewers on candidates' performance. *Journal of Occupational Psychology*, 49(3), 171-176.
- Keenan, A., & Wedderburn, A. A. (1975). Effects of the non-verbal behaviour of interviewers on candidates' impressions. *Journal of Occupational Psychology*, 48, 129-132.
- King, E. B., Madera, J. M., Hebl, M. R., Knight, J. L., & Mendoza, S. A. (2006). What's in a Name? A Multiracial Investigation of the Role of Occupational Stereotypes in Selection Decisions. *Journal of Applied Social Psychology*, 36(5), 1145-1159.
- Knapp, M. L., & Hall, J. A. (2009). *Nonverbal Communication in Human Interaction*. Boston: Wadsworth.

- Lakin, J. L., Jefferies, V. E., Cheng, C. M., & Chartrand, T. L. (2003). The Chameleon Effect as Social Glue: Evidence for the Evolutionary Significance of Nonconcious Mimicry. *Journal of Nonverbal Behavior*, 27, 145-162.
- Lievens, F., & Peeters, H. (2008). Interviewers' sensitivity to impression management tactics in structured interviews. *European Journal of Psychological Assessment*, 24(3), 174-180.
- Lin, T., Dobbins, G., & Farh, J. (1992). A field study of race and age similarity effect on interview ratings in conventional and situational interview. *Journal of Applied Psychology*, 77(3), 363-371.
- Lippi-Green, R. (1997). *English with an accent: Language, ideology, and discrimination in the United States.* London: Routledge.
- Luhby, T. (2010, July 3). Job gloom at all-time high. Retrieved October 18, 2011, from CNN Money:
  http://money.cnn.com/2010/07/03/news/economy/discouraged\_workers/index.htm
- Lykken, D. (1974). Psychology of the lie detection industry. *American Psychologist*, 29, 725-739.
- Lykken, D. (1979). The detection of deception. *Psychological Bulletin*, 86, 47-53.
- Macan, T. (2009). The employment interview: A review of current studies and directions for future research. *Human Resource Management Review*, 19, 203-218.
- Maurer, T. J., Solamon, J. M., & Lippstreu, M. (2008). How does coaching interviewees affect the validity of a structured interview? *Journal of Organizational Behavior*, 29(3), 355-371.
- Maurer, T. J., Solamon, J. M., Andrews, K. D., & Troxtel, D. D. (2001). Interviewee coaching, preparation strategies, and response strategies in relation to performance in situational employment interviews: An extension of Maurer, Solamon, and Troxtel (1998). *Journal of Applied Psychology*, 86(4), 709-717.
- Mayfield, E. (1964). The selection interview: A re-evaluation of published research. *Personnel Psychology*, 17, 239-260.
- McNair, F. (2001, February 10). The Proper Interview: Behavioral descriptive method three times more reliable. *The Calgary Herald*.
- Mehrabian, A. (1972). *Nonverbal communication*. Chicago: Aldine-Atherton.
- Middendorf, C. H., & Macan, T. H. (2002). Note-taking in the employment interview: Effects on recall and judgments. *Journal of Applied Psychology*, 87(2), 293-303.

- Motowidlo, S., & Burnett, J. (1995). Aural and visual sources of validity in structured employment interviews. *Organizational Behavior and Human Decision Processes*, 61, 239-249.
- Nash, R., Fieldman, G., Hussey, T., Lévêque, J.-L., & Pineau, P. (2006). Cosmetics: They Influence More Than Caucasian Female Facial Attractiveness. *Journal of Applied Social Psychology*, 36(2), 493-504.
- Nikolaou, I. (2003). Fitting the person to the organisation: examining the personality-job performance relationship from a new perspective. *Journal of Managerial Psychology*, 18, 639-648.
- Palmen, A., Didden, R., & Arts, M. (2008). Improving question asking in high-functioning adolescents with autism spectrum disorders: Effectiveness of small-group. *Autism*, 12(1), 83-98.
- Peeters, H., & Lievens, F. (2006). Verbal and Nonverbal Impression Management Tactics in Behavior Description and Situational Interviews. *International Journal of Selection and Assessment*, 14(3), 206-222.
- Penton-Voak, I., & Perrett, D. (2000). Female preference for male faces changes cyclically: Further evidence. *Evolutionary Human Behavior*, 21, 39-48.
- Peters, L., & Terborg, J. (1975). The effects of temporal placement of unfavorable information and of attitude similarity on personnel selection decisions. *Organizational Behavior and Human Performance*, 13, 279-293.
- Purkiss, S. L., Perrewé, P. L., Gillespie, T. L., Mayes, B. T., & Ferris, G. R. (2006). Implicit sources of bias in employment interview judgments and decisions. *Organizational Behavior and Human Decision Processes*, 101(2), 152-167.
- Puts, D., Gaulin, S., & Verdolini, K. (2006). Dominance and the evolution of sexual dimorphism in human voice pitch. *Evolutionary Human Behavior*, 27, 283-296.
- Puts, D., Gaulin, S., & Verdolini, K. (2006). Dominance and the evolution of sexual dimorphism in human voice pitch. *Evolutionary Human Behavior*, 27, 283-296.
- Rakić, T., Steffens, M. C., & Mummendey, A. (2011). When it matters how you pronounce it: The influence of regional accents on job interview outcome. *British Journal of Psychology*, 102(4), 868-883.
- Rand, T., & Wexley, K. (1975). Demonstration of the effects, "similar to me", in simulated employment interviews. *Psychological Reports*, 36, 535-544.

- Riggio, R. E., & Throckmorton, B. (1988). The Relative Effects of Verbal and Nonverbal Behavior, Appearance, and Social Skills on Evaluations Made in Hiring Interviews. *Journal of Applied Social Psychology*, 4, 331-348.
- Rowe, P. (1960). Individual Differences in Assessment Decisions: First Results from a Long-Term Research Project. *Personnel Psychology*, 19, 41-53.
- Rundquist, E. (1947). Development of an interview for selection purposes. In G. Kelly, *New methods in applied psychology* (pp. 85-95). College Park: University of Maryland.
- Russell, B., Perkins, J., & Grinnell, H. (2008). Interviewees' overuse of the word 'like' and hesitations: Effects in simulated hiring decisions. *Psychological Reports*, 102(1), 111-118.
- Rynes, S. L., Bretz, R. D., & Gerhart, B. (1991). The importance of recruitment in job choice: A different way of looking. *Personnel Psychology*, 44(3), 487-521.
- Sackett, P., & Decker, P. (1979). Detection of deception in the employment context: A review and critical analysis. *Personnel Psychology*, 487-506.
- Schmitt, N. (1976). Social and Situational Determinants of Interview Decisions: Implications for the Employment Interview. *Personnel Psychology*, 29, 79-101.
- Scott, W. (1915, October). Scientific selection of salesmen. *Advertising and Selling Magazine*, pp. 5-6, 94-96.
- Sears, G. J., & Rowe, P. M. (2003). A personality-based similar-to-me effect in the employment interview: Conscientiousness, affect-versus competence-mediated interpretations, and the role of job relevance. *Canadian Journal of Behavioural Science*, 35-47.
- Shahani, C., Dipboye, R. L., & Gehrlein, T. M. (1993). Attractiveness bias in the interview: Exploring the boundaries of an effect. *Basic and Applied Social Psychology*, 14(3), 317-328.
- Sherer, M., Pierce, K. L., Paredes, S., Kisacky, K. L., Ingersoll, B., & Schreibman, L. (2001). Enhancing conversation skills in children with autism via video technology: Which is better, 'Self' or 'Other' as a model? *Behavior Modification*, 25(1), 140-158.
- Slater, M. A., Good, A. B., & Dimsdale, J. E. (1992). The stress interview in hypertension research. In E. H. Johnson, W. D. Gentry, & S. Julius, *Personality, elevated blood pressure, and essential hypertension* (p. 175). Washington, DC: Hemisphere Publishing Corp.
- Springbett, B. M. (1958). Factors affecting the final decision in the employment interview. Canadian Journal of Psychology, 12, 13-22.

- Springbett, B. M. (1958). Factors affecting the final decisions in the employment interview. Canadian Journal of Psychology , 12, 13-22.
- Stafford, D. (2011, November 6). How to maneuver the 'stress interview'. Lansing State Journal.
- Stewart, G. L., Dustin, S. L., Barrick, M. R., & Darnold, T. C. (2008). Exploring the handshake in employment interviews. *Journal of Applied Psychology*, 1139-1146.
- Structured Interviews: a Practical Guide. (2008, September). Retrieved October 25, 2011, from U.S. Office of Personnel Management:

  http://apps.opm.gov/ADT/ContentFiles/SIGuide09.08.08.pdf
- Sydiaha, D. (1961). Bales' interaction process analysis of personnel selection interviews. *Journal of Applied Psychology*, 45, 395-401.
- Sydiaha, D. (1959). On the equivalence of clinical and statistical methods. *Journal of Applied Psychology*, 43, 395-401.
- Title 42,2000e-2. Unlawful employment practices. (1964, July 2). Retrieved October 25, 2011, from Cornell University Legal Information Institute:

  http://www.law.cornell.edu/uscode/42/2000e-2.html
- Tsai, W.-C., Chen, C.-C., & Chiu, S.-F. (2005). Exploring Boundaries of the Effects of Applicant Impression Management Tactics in Job Interviews. *Journal of Management*, 31(1), 108-125.
- Varma, A., Toh, S. M., & Pichler, S. (2006). Ingratiation in job applications: Impact on selection decisions. *Journal of Managerial Psychology*, 21(3), 200-210.
- Vine, I. (1971). Communication by facial-visual signals. In J. Crook, *Social Behaviour in Animals and Man.* New York: Academic Press.
- Vrij, A., Edward, K., Roberts, K. P., & Bull, R. (2000). Detecting deceit via analysis of verbal and nonverbal behavior. *Journal of Nonverbal Behavior*, 24(4), 239-263.
- Wagner, R. (1965). The employment interview: A critical review. *Psychological Bulletin*, 100-116.
- Webster, E. C. (1964). Decision making in the employment interview. Montreal: Eagle.
- Willemyns, M., Gallois, C., Callan, V. J., & Pittam, J. (1997). Accent accommodation in the job interview: Impact of interviewer accent and gender. *Journal of Language and Social Psychology*, 16(1), 3-22.
- Wolff, S. E., & Puts, D. A. (2010). Vocal masculinity is a robust dominance signal in men. *Behavioral Ecology and Sociobiology*, 64, 1673-1683.

- Wonderlic, E. (1942). Improving interview technique. *Personnel*, 18, 232-238.
- Yonge, K. (1956). The value of the interview: An orientation and a pilot study. *Journal of Applied Psychology*, 40, 25-31.
- Young, D. M., Beier, E. G., & Beier, S. (1979). Beyond Words: Influence of Nonverbal Behavior of Female Job Applicants in the Employment Interview. *Perosnnel & Guidance Journal*, 57, 346-351.
- Young, D., & Beier, E. (1977). The role of applicant nonverbal communication in the employment interview. *Journal of Employment Counseling*, 14, 154-165.
- Zuckerman, M., Hodgins, H., & Miyake, K. (1990). The vocal attractiveness stereotype: replication and elaboration. *Journal of Nonverbal Behavior*, 14, 97-112.