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Smiling, Job Qualifications, and Ratings of Job Applicants

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ABSTRACT

The effects of facial expression and job qualifications on job applicant ratings were examined using a simulated scenario. Main effects for facial expression and job qualifications were found. Smiling applicants were more likely to be hired and received higher ratings on additional attributes. Applicants who were qualified for the job were more likely to be hired and also received higher ratings. The positive impression formed via the smiling expression mediated its effects on some ratings but did not mediate the effect of the smile on likelihood of being hired. The positive impression bolstered the effects of qualifications on likelihood of being hired.

Keywords: Facial Expression, Smiling, Job Qualifications, Nonverbal Cues

INTRODUCTION

As social beings, we are constantly forming impressions of others often from their nonverbal displays such as facial expressions, especially in situations requiring selection of job applicants. These nonverbal behaviors may offer us a poignant glimpse into the characteristics and motives of individuals. McHugo, Lanzetta, Sullivan, Masters, and Englis (1985) suggest that nonverbal behavior, e.g., facial expressions, conveys information regarding emotional state and behavioral intentions. These expressions are unintended, unconscious, and less controllable than verbal behaviors, therefore they are more likely to be genuine and sincere (Burnett & Motowidlo, 1998). Spangler (1995) even notes that facial expressions are more communicative than body movements. Recent

research has defined several key nonverbal behaviors that cause others to view us in a favorable light...namely, the smile (Otta, Lira, Delevati, Cesar, & Pires, 1994). In particular, smiling is associated with more favorable impressions of warmth and sociability and can lead to more positive ratings of job applicants (Damhorst & Reed, 1986). This study, thus, examines the effects of a smiling facial expression on ratings of job applicants including the likelihood of being hired.

Numerous studies have discovered that individuals who smile are rated higher on positive attributes (Abel & Abel, 2007; Abel & Watters, 2006; Lau, 1982; Reis et al., 1990). People generally like people who are smiling and attribute more positive characteristics such as being intelligent, pleasant, (Lau, 1982; Ekman, Friesen, & Ellsworth, 1982), likeable, sincere, sociable, trustworthy, genuine, friendly, happy, self-assured, and charming (Abel & Abel, 2007; Abel & Watters, 2006). Kraut's (1978) research even found that people believe that honest people smile more. Smiling has also been associated with higher ratings on attractiveness under the "what is smiling is beautiful and good" phenomena (Reis et al., 1990).

Smiling not only creates favorable impressions, it also improves perceptions of physical appearance (Abel & Watters, 2007). Some researchers found that appraisals of physical attractiveness predicted approximately seventy percent of applicant evaluations (Damhorst & Reed, 1986; see also Riggio & Throckmorton, 1988). Further, physically appealing people are hired more often than those lacking physical appeal (Bardack & McAndrew, 1985; Gilmore, Beehr, & Love, 1986). Gilmore et al. (1986) also note that attractive people are rated as more qualified and with higher employment potential. Akin to smiling at interviews, physical attractiveness leads to a surfeit of advantageous interview evaluations. The advantages of smiling, however, appear to be predominantly related to perceptions of sociability (Reis et al., 1990).

One area that indubitably benefits from the assessment of nonverbal behavior, smiling in particular, is personnel selection. Most companies use interviewing in the employee selection process. Interviewers often have only a snapshot of time during an interview to ascertain if an individual will be a valuable worker. Facial expressions are nonverbal displays that are readily observable; as such, smiling is certainly noticed during the interview process and should influence the hiring process by swaying the interviewer's impressions and subsequent evaluations. Rasmussen's (1984) results found that numerous nonverbal cues including smiling influenced employer's evaluations. Further, Dougherty, Turban, and Callender (1994) discovered that interviewers who held positive first impressions as a result of positive visual displays, engaged in more serious recruiting of the applicant including more discussion about the company to entice the potential applicant toward accepting the position. Consequently, the significance of first impressions via positive nonverbal cues, should not be underestimated. And, because of the significance of first impressions, a large amount of research has concentrated on the prognostic legitimacy of the interview process (Dougherty et al., 1994).

Burnett and Motowidlo (1998) suggest that nonverbal cues influence hiring decisions and, in some cases, visual cues sway interviewer's opinions even more so than

verbal content. Many studies have found that better applicant evaluations have links to smiling in combination with other nonverbal visual displays (DeGroot & Motowidlo, 1999; Motowidlo & Burnett, 1995; Parsons & Liden, 1984; Riggio & Throckmorton, 1988). Moreover, facial expressions specifically affect the evaluations of an applicant's sociability characteristics (Damhorst & Reed, 1986). Burnett and Motowidlo (1998) go so far as to say that nonverbal signals are sometimes more potent than verbal signals. Hence, smiling appears to be a central ingredient in successfully interviewing for a job.

Studies have found emotional displays such as smiling, to have a contagious effect on interactions with others (Kraut & Johnston, 1979). One's facial expression can thus affect the emotions of others, a phenomenon called emotional contagion (Hatfield, Cacioppo, & Rapson, 1993; Hatfield, Cacioppo, & Rapson, 1994). Emotional contagion refers to a process consisting of observation and social assessment in addition to a more involuntary and perhaps unconscious process referred to as "primitive emotional contagion." Primitive contagion is the propensity to mindlessly imitate bodily expression and verbal communications with those of another individual (Hatfield, Cacioppo, & Rapson, 1994). As a result, primitive contagion allows one to connect with other individuals in an emotional manner. Some studies also indicate that primitive emotional contagion may be biologically programmed due to the fact that for the most part, it operates automatically (Wild, Erb, & Bartels, 2001). Therefore, positive nonverbal behavior such as an applicant's smile can be contagious and lead the interviewer to feel more upbeat and thus engage in positive interaction. These positive feelings could influence the interviewer toward attributing more favorable characteristics to a job applicant and invariably play a role in the selection process regardless of the applicant's qualifications for the job. These suggestions are supported by DeGroot and Motowidlo's study (1999) which found that interviewers developed "affective reactions" to applicants' positive nonverbal displays including smiling, which subsequently led to interviewers judging applicants as more valuable employees.

In sum, our impressions of others are constantly being formed, changed, and revised. These impressions are based on a number of factors including nonverbal behaviors. We do rely on these factors to provide some insight into the character of an individual. It is clear, however, that some impressions formed about people have more consequences than others. In the context of employee selection procedures, it is crucial to form accurate impressions of applicants because personnel selection decisions are a conscious acceptance of one potential employee's qualities and skills and a simultaneous rejection of others. The nonverbal behaviors that an individual expresses during the interview may or may not be an accurate representation of his or her character, but studies show that these behaviors will indeed play an important role in the interviewer's perception of the individual (see DeGroot & Motowidlo, 1999); and often considered a more accurate representation of the individual than their verbal behavior (Burnett & Motowidlo, 1998). These positive nonverbal behaviors can be contagious and lead the interviewer to also feel positive and engage in positive interaction. This positivity could subsequently influence the interviewer toward attributing more favorable characteristics to the applicant, which invariably influences the selection process.

Purpose of the Study

Combining the two constructs of impression formation and emotional contagion, this research study examines their roles in the employee selection process. It is important to assess whether smiling in isolation of other nonverbal cues, predisposes interviewers to form a more positive impression of job applicants and, thus, rate applicants in a more positive manner.

In particular, we were interested in examining whether a smiling individual was more likely to be hired when less qualified for a job than if the individual bore a neutral nonsmiling facial expression, and whether smiling had any effect when qualified for the job. Further, we hypothesized that a positive facial expression (smiling) would create a more favorable impression of the applicants' potential work performance, and increase the likelihood of being hired if unqualified for a job, whereas, smiling would have no effect on hiring if qualified. We further expected that the type of impression formed by the smiling facial expression would mediate the effects of the facial displays on likelihood of being hired along with other ratings of the job applicant. Finally, we explored whether a positive impression would moderate the relationship between job qualifications and likelihood of being hired such that a strong positive impression would strengthen the effects of job qualifications on likelihood of being hired.

METHOD

Participants

Participants were 65 male and 64 female undergraduate students voluntarily recruited from psychology courses for course credit. Average age was 20.81 years ($SD = 4.23$) and 62% of the sample were first-year or second-year students.

Stimulus Materials

Photographs used in the study were those produced in the lab of Matsumoto and Ekman (1988) entitled Japanese and Caucasian facial expressions of emotion (JACFEE) and neutral faces (JACNeuf). One Caucasian male and one Caucasian female were chosen. Photographs of the man and woman displaying either a "felt" smile or a neutral expression were used. Therefore, four photographs were used in this study: (1) a female displaying a felt smile, (2) the same female displaying a neutral expression, (3) a male displaying a felt smile, and (4) the same male displaying a neutral expression. These photos depicted the individuals from the shoulders up similar to a "mug" shot. They were chosen because they had been validated by Matsumoto and Ekman (1988) as portraying a felt smile and a neutral expression.

A job description was written for a disc jockey at a bogus radio station called WWCN. The description included general information as to the nature and responsibilities of a radio disc jockey and qualifications for the position. The following general information was listed:

The disc jockey will be responsible for on-air activity in the form of an afternoon program at WWCN. WWCN is a Pop-music station covering 300 square miles with a listening audience of approximately 500,000. The candidate will develop a daily play list and new show segments, book and interview local names and talent for interviews, and promote WWCN in the community.

Below the general information was a list of qualifications that included:

- An outgoing, energetic personality with charisma
- Knowledge and proficiency in using soundboard technology
- Bachelor's Degree in Communications, or some related field, with a minimum 3.5 GPA
- At least three (3) years experience in a similar position

Two versions of a resume and letter of application were designed for a job applicant named Pat. The name "Pat" was chosen because of its gender-neutrality, allowing use of both sets of pictures. The resume included typical information such as experience, education, and honors and awards along with the name, address, etc. of the applicant. The only difference between the two versions of the resume was the years of experience in a similar position. The letters of application were also designed to augment the resume and emphasize the years of experience. One version indicated that Pat had only 1 year of experience (and therefore unqualified for the position). This letter included the information:

I am applying for the disc jockey position at your radio station. I realize that 3 years of experience is required for this position. Unfortunately, I only have 1 year of experience. I do feel, however, that I am still able to do this job and do it effectively. Please give me an opportunity and I will not let you down. Thank you for your time.

The other version indicated that Pat had 3 years of experience (and therefore qualified for the position). This letter included the information:

I am applying for the disc jockey position at your radio station. I realize that 3 years of experience is required for this position. I have 3 years of experience and feel that I am more than able to do this job effectively. Please give me an opportunity and I will not let you down. Thank you for your time.

Procedure

A 2 X 2 X 2 factorial design was used which varied sex of applicant (male vs. female), qualification of applicant (unqualified vs. qualified), and facial expression (smiling vs. neutral). Sex of applicant was manipulated by presenting participants with a photograph of either a male or female. Facial expression was manipulated by presenting

participants with a photograph of the same male or female applicant displaying a smile or neutral facial expression. Pictures of the job applicants were used to control for other nonverbal cues that could affect results for the facial expression. Qualification was manipulated by giving each participant a resume and letter of application for a qualified or unqualified applicant according to stated job qualifications in the job description.

Participants signed consent forms and were tested in small groups. The participants received one of the four possible pictures. After the participants examined the picture, they rated the applicant on 15 different bipolar adjectives on a 12-point scale, including: attractiveness, friendliness, likeability, sincerity, sociability, assertiveness, submissiveness, trustworthiness, competence, genuine, happiness, self-assured, ambitious, hardworking, and charming. Positive and negative adjectives were randomly ordered so that not all positive traits were to one side of the pole. Participants were required to first rate the applicant in the picture on these adjectives in order to engage the participants in impression formation before completing questions related to employment selection. After looking at the picture and rating the applicant on the adjectives, participants were given the job description that included the job qualifications, and a resume and letter of application for the applicant in their picture. After they read over and compared the resume and letter of application with the job description, they answered 11 questions using a 12-point scale (ranging from 1 = not at all to 12 = extremely). Seven questions of primary interest included evaluating Pat's qualifications for the job, likelihood of hiring Pat, how good of an employee Pat would be, whether Pat would be a good match for the job and a good disc jockey, how well Pat would get along with the other employees, and how well Pat would work with others. This questionnaire was prefaced with the instructions: "After reading over and comparing the resume and job description, please answer the following questions on how you feel." After the participants completed the questions, they were thanked for their participation and debriefed.

RESULTS

A Multivariate Analysis of Variance (MANOVA) was conducted to test for qualifications of applicant (0 = unqualified, 1 = qualified), sex of applicant (0 = male, 1 = female) and facial expression (0 = smiling, 1 = neutral) on the 7 ratings of the job applicant. An overall significant main effect occurred for qualifications, $F(7, 114) = 6.80$, $p < .001$, $\eta^2 = .29$, and did not significantly interact with the other variables. An overall significant main effect also occurred for facial expression, $F(7, 114) = 2.62$, $p < .05$, $\eta^2 = .12$, and did not significantly interact with the other variables. No significant main effects or interactions with other variables were found for sex of applicant.

Pat, whose resume and letter indicated the required years of experience for the job, was viewed as significantly more qualified for the job, ($M = 9.33$, $SD = 1.81$), than Pat whose resume and letter indicated less required years of experience, ($M = 7.17$, $SD = 2.12$), supporting the experimental manipulation of the qualifications variable, $F(1, 120) = 39.56$, $p < .001$, $\eta^2 = .25$. The qualified Pat ($M = 8.97$, $SD = 1.83$) was also more likely to be hired than the unqualified Pat ($M = 6.97$, $SD = 2.42$),

$F(1, 120) = 28.15, p < .001, \eta^2 = .19$. The qualified Pat ($M = 9.22, SD = 1.72$) was rated higher on being a good employee than the unqualified Pat ($M = 7.82, SD = 2.05$), $F(1, 120) = 18.28, p < .001, \eta^2 = .13$. The qualified Pat ($M = 8.74, SD = 2.05$) was also considered a better match for the job than the unqualified Pat ($M = 6.94, SD = 2.42$), $F(1, 120) = 16.69, p < .001, \eta^2 = .12$. The qualified Pat ($M = 8.56, SD = 2.12$) was rated higher on being a good disc jockey than the unqualified Pat ($M = 7.18, SD = 2.42$), $F(1, 120) = 12.48, p < .01, \eta^2 = .09$. Finally, the qualified Pat ($M = 8.70, SD = 2.04$) was also rated higher on working well with others than the unqualified Pat ($M = 7.97, SD = 1.70$), $F(1, 120) = 12.48, p < .01, \eta^2 = .09$. (See Table 1.)

Table 1

Descriptive Statistics for Ratings on “Pat”

Rating	Smiling Expression		Neutral Expression	
	Qualified ^a	Unqualified ^b	Qualified ^c	Unqualified ^d
How Qualified is Pat?	9.41 (1.97)	7.45 (1.72)	9.29 (1.68)	6.88 (2.46)
Likelihood of hiring Pat.	9.16 (2.00)	7.52 (2.09)	8.77 (1.65)	6.41 (2.64)
How good of an employee?	9.03 (2.01)	7.85 (2.19)	9.42 (1.36)	7.78 (1.91)
Good match for the job?	9.25 (1.57)	8.15 (1.89)	8.74 (2.05)	6.94 (2.42)
Good disc jockey?	8.69 (2.36)	7.82 (2.31)	8.42 (1.88)	6.53 (2.40)
Get along well with others?	9.09 (1.59)	8.39 (1.89)	8.29 (2.27)	7.94 (1.89)
Work well with others?	9.06 (1.63)	8.12 (1.73)	8.32 (2.37)	7.81 (1.69)

Note. Standard deviations in parentheses. Ratings are on a 12-point scale ranging from 1 = not at all to 12 = extremely.

^an = 32, ^bn = 33, ^cn = 31, ^dn = 32.

Pat with a smiling facial expression ($M = 8.32, SD = 2.19$) was more likely to be hired than Pat with a neutral expression ($M = 7.57, SD = 2.49$), $F(1, 120) = 3.98, p < .05, \eta^2 = .03$. The smiling Pat ($M = 8.69, SD = 1.81$) was also considered a better match for the job than the Pat with a neutral expression ($M = 7.82, SD = 2.41$), $F(1, 120) = 5.91, p < .05, \eta^2 = .05$. The smiling Pat ($M = 8.25, SD = 2.36$) was rated higher on being a good disc jockey than Pat with a neutral expression ($M = 7.46, SD = 2.34$), $F(1, 120) = 3.83, p = .05, \eta^2 = .03$. Finally, the main effect for facial expression on rating of how well Pat would get along with other employees approached significance, $F(1, 120) = 3.38,$

$p = .07$, $\eta^2 = .03$. The smiling Pat ($M = 8.74$, $SD = 1.77$) was rated higher on working well with others than Pat with a neutral expression ($M = 8.11$, $SD = 2.08$). (See Table 1.)

Composite Impression and Ratings of Applicant

Participants initially rated “Pat” on 15 different bipolar adjectives before answering questions related to employment selection. These ratings were designed to encourage impression formation prior to completing the employment questions. An initial analysis found that the smiling “Pat” was not rated as significantly more physically attractive than “Pat” with a neutral expression, $p = .69$. An average of these characteristics was computed as a measure of the participant’s impression of Pat with either a smiling or neutral facial expression. The Cronbach alpha for the 15 item scale was .79 supporting adequate internal reliability. Pat who was smiling was rated significantly more positive ($M = 8.00$, $SD = 1.01$) on the composite impression variable than the “Pat” with a neutral expression, ($M = 7.27$, $SD = 1.03$), $F(1, 118) = 16.39$, $p < .001$, $\eta^2 = .12$. No significant main effect for sex or interaction with sex was significant.

The composite impression variable was positively albeit moderately correlated with the ratings of the job applicant. The impression variable was significantly correlated, $ps < .05$, with likelihood of being hired, $r = .21$, rating of “Pat” as a good employee, $r = .40$, as a good match for the job, $r = .38$, as a good disc jockey, $r = .43$, how well Pat would get along with other employees, $r = .44$, and would work well with other employees, $r = .44$. Finally, the composite impression variable was moderately correlated with the ratings of how qualified “Pat” was for the job, $r = .45$.

Mediating Effects of Impression Formation between Facial Expression and Applicant Ratings

A series of Analyses of Covariance (ANCOVA) were conducted to partial out the impression of Pat to determine whether the composite impression variable mediated the significant effects of facial expression previously found on likelihood of hiring and the other ratings. The separate ANCOVAs were conducted in order to determine whether the impression variable was a significant covariate for each individual variable. According to Reis (1982), cancellation of an effect when partialing out the effect of another variable, supports a mediation effect.

No mediation effect existed for likelihood of hiring Pat. The impression variable was not a significant covariate, $p = .53$, therefore, a smiling facial expression continued to be significantly related to higher likelihood of hiring. However, the impression variable was a significant covariate for the rating of Pat as a good match for the job, $F(1, 117) = 10.28$, $p < .01$, $\eta^2 = .08$, for the rating of Pat as a good disc jockey, $F(1, 117) = 13.38$, $p < .01$, $\eta^2 = .10$, and the rating of Pat as getting along well with other employees, $F(1, 117) = 21.39$, $p < .01$, $\eta^2 = .16$. The effects for the smiling facial expression were no longer significant when controlling for the impression measure on ratings of whether Pat was a good match for the job, $p = .20$, how good a disc jockey Pat would be, $p = .51$, and how well Pat would get along with others, $p = .96$. These results

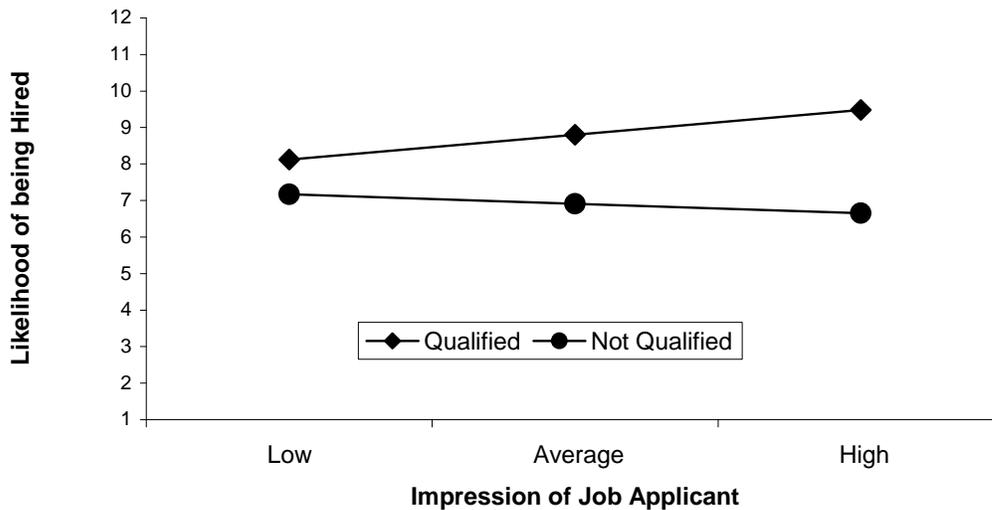
suggest that the effects of facial expression on these more person-centered variables were mediated by the impression formed when viewing Pat with either a smiling or neutral facial expression, however, no mediation effect occurred in likelihood of hiring Pat. Moreover, a smiling facial expression continued to be related to a higher likelihood of being hired.

Moderating Effect of Impression Formation between Qualifications and Likelihood of Being Hired

While the previous MANOVA did not find a significant interaction between facial expression and job qualifications on likelihood of hiring Pat, this analysis explored whether the positive impression formed via a smiling facial expression would moderate the relationship. Hence, hierarchical multiple regression analyses (Aiken & West, 1991) were conducted to maintain the continuity of the composite impression variable. The three-way interaction between sex of applicant, qualifications, and impression was not significant, $p = .94$; sex of applicant was not significant nor did it interact with any of the other variables and was thus dropped from the analyses. A significant 2-way interaction between job qualifications and impression accounted for 4% of the variance in likelihood of being hired, $F(1, 122) = 5.61, p < .05$.

Simple linear regression equations revealed a significant positive relationship between positive impression and likelihood of being hired for the qualified applicant, $B = .63, t(122) = 2.62, p < .05$, and yet no significant relationship existed for the unqualified applicant, $B = -.24, t(122) = -.86, p = .39$. Additional regression analyses examined the differences between the qualified vs. unqualified job applicant at a lower positive impression (1 *SD* below the mean) and a higher positive impression (1 *SD* above the mean). No significant differences in likelihood of being hired occurred between the qualified and unqualified applicants when the positive impression was less than average, $B = 0.95, t(122) = 1.74, p = .08$, whereas a highly significant difference occurred when the positive impression was much higher than average, $B = 2.82, t(122) = 5.03, p < .001$; the qualified applicant associated with a very positive impression was more likely to be hired. Further, a job applicant who was qualified and associated with an average positive impression was also more likely to be hired, $B = 1.89, t(122) = 4.84, p < .001$. These results support the moderating effect of the impression variable on the relationship between job qualifications and likelihood of hiring Pat. (See Figure 1.)

Figure 1. Simple regression lines showing relationships between impression of applicant and likelihood of being hired for qualified and unqualified job applicants



DISCUSSION

As a social species, we attribute certain characteristics and intentions to individuals portraying particular facial expressions such as the smile via the process of impression formation. This phenomenon is particularly prominent in the personnel selection process. While other studies have supported the strong effects of nonverbal cues on interviewers' judgments of job applicants (Burnett & Motowidlo, 1998; DeGroot & Motowidlo, 1999; Dougherty et al., 1994; Motowidlo & Burnett, 1995; Parsons & Liden, 1984; Riggio & Throckmorton, 1988; Rasmussen, 1984), no study has isolated the effects of a smiling facial expression on job applicant ratings.

Our study was thus designed to examine the effects of a smiling facial expression on a job applicant's likelihood of being hired for a particular job in addition to other ratings of the applicant as an employee. We expected that a smiling vs. neutral facial expression would interact with meeting job qualifications on these ratings. This interaction would imply that an applicant with a smiling facial expression who did not meet the job qualifications would be more likely to be hired than one with a neutral facial expression who did not meet the qualifications, whereas, no effects for facial expression would exist for an applicant who did meet the qualifications. Our hypothesized interaction was not found, however we did find a significant main effect for the smiling facial expression. The job applicant who was smiling in his/her picture was more likely to be hired regardless of job qualifications, even when controlling for the type of impression formed. In other words, the impression formed by the facial expression was not a

significant mediator of the relationship between facial expression and likelihood of being hired.

Additional effects of the smiling facial expression were found for other ratings of the job applicant. A smiling “Pat” was rated higher on being a good match for job, on how good a disc jockey “Pat” would be, and how well “Pat” would get along with other employees. However, the effects of the smiling facial expression on these ratings were mediated by the positive impression formed of the smiling “Pat” vs. “Pat” with the neutral expression, and consequently, the effects for the smile were eliminated when controlling for the positive impression. Our results suggest that smiling does lead to the formation of a positive impression and subsequently affects more “person centered” judgments of the job applicant similar to the results of DeGroot and Motowidlo (1999) using a composite of several nonverbal cues. However, the smiling facial expression continued to be a powerful influence on likelihood of being hired, over and above its positive impression.

As would be expected, we found that job qualifications had highly significant effects on likelihood of being hired, however, it was moderated by the type of impression formed of the applicant. Our final analysis suggests that a more positive impression formed via a smiling facial expression strengthens the effects of job qualifications on likelihood of being hired. Furthermore, the likelihood of being hired for a job is no different for individuals with or without the required job qualifications if the impression is less than average, whereas, likelihood of being hired is much greater for a qualified job applicant who has made an exceptionally good impression on an interviewer vs. an unqualified applicant making the same type of impression. Therefore, job qualifications are definitely important attributes, and yet, a good impression boosts the probability of being hired.

In sum, our study revealed that a smiling facial expression may be a powerful nonverbal cue, in isolation of other nonverbal cues such as eye contact, body orientation, or gestures, on interviewers’ judgments especially related to hiring decisions. Further, the positive impression formed via a smiling facial expression can be a crucial influence on more person-centered judgments about a job applicant, e.g., being a good match for the job. Finally, we found that a good impression can significantly bolster the effects of job qualifications on the odds of being hired. There are, however, several limitations of this study that must be considered. First, the sample consisted of undergraduate college students who may be more receptive to a positive facial expression, as well as evaluate application materials differently than human resource personnel. Further, the manipulation of the facial expression was accomplished using pictures in order to control for other nonverbal cues. This can be a limitation in regard to its external validity but also supports its internal validity by isolating the effects of the smile. Future research could include videotaping applicants (confederates) while choreographing and standardizing other nonverbal cues, and utilize actual human resource personnel for ratings of job applicants to increase external validity and test for continued effects of facial expression. Finally, this study used only one job description, a disc jockey at a radio station, and our results do not necessarily generalize to other jobs. Future research should replicate the

study with other job descriptions. While we did anticipate and found that smiling would lead to more positive evaluations of the job applicant, our hypothesized relationship between smiling and increased likelihood of being hired when unqualified for the job was not found. Evidently a smiling facial expression may not be powerful enough to overcome the robust effects of job qualifications related to probability of being hired, but rather can reinforce its effects via formation of a positive impression.

REFERENCES

- Abel, M. H., & Abel, M. (2007). The effects of a sales clerk's smile on consumer perceptions and behaviors. *American Journal of Psychological Research, 3*(1), 17-28.
- Abel, M. H., & Watters, H. (2006). Attributions of guilt and punishment as functions of physical attractiveness and smiling. *Journal of Social Psychology, 145*(6), 687-702.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Bardack, N., & McAndrew, F. (1985). The influence of physical attractiveness and manner of dress on success in a simulated personnel decision. *Journal of Social Psychology, 125*(6), 777-778.
- Burnett, J., & Motowidlo, S. (1998). Relations between different sources of information in the structured selection interview. *Personnel Psychology, 51*(4), 963-984.
- Damhorst, M. & Reed, J. (1986). Clothing color value and facial expression: Effects on evaluations of female job applicants. *Social Behavior and Personality, 14*(1), 89-98.
- 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*(6), 986-993.
- Dougherty, T., Turban, D., & Callender, J. (1994). Confirming first impressions in the employment interview: A field study of interview behavior. *Journal of Applied Psychology, 79*(5), 659-665.
- Ekman, P., Friesen, W. V., & Ellsworth, P. (1982). What components of facial behavior are related to observers' judgments or emotion? In P. Ekman (Ed.), *Emotion in the human face* (pp. 98-110). Cambridge: Cambridge University Press.
- Gilmore, D., Beehr, T., & Love, K. (1986). Effects of applicant sex, applicant physical attractiveness, type of rater, and type of job in interview decisions. *Journal of Occupational Psychology, 59*(2), 103-109.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1993). Emotional contagion. *Current Directions in Psychological Science, 2*(3), 96-99
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional contagion*. New York: Cambridge University Press.
- Kraut, R. E. (1978). Verbal and nonverbal cues in the perception of lying. *Journal of Personality and Social Psychology, 36*(4), 380-391.
- Kraut, R. & Johnston, R. (1979). Social and emotional messages of smiling: An ethological approach. *Journal of Personality and Social Psychology, 37*(9), 1539-1553.

- Lau, S. (1982). The effect of smiling on person perceptions. *The Journal of Social Psychology, 117*(1), 63-67.
- McHugo, G., Lanzetta, J., Sullivan, D., Masters, R., & Englis, B. (1985). Emotional reactions to a political leader's expressive displays. *Journal of Personality and Social Psychology, 49*(6), 1513-1529.
- Motowidlo, S. J., & Burnett, J. R. (1995). Aural and visual sources of validity in structured employment interviews. *Organizational Behavior and Human Decision Processes, 61*(3), 239-249.
- Otta, E., Lira, B., Delevati, N., Cesar, O., & Pires, C. (1994). The effect of smiling and head tilting on personal perception. *Journal of Psychology Interdisciplinary and Applied, 128*(3), 323-331.
- Parsons, C. K., & Liden, R. C. (1984). Interviewer perceptions of applicant qualifications: A multivariate field study of demographic characteristics and nonverbal cues. *Journal of Applied Psychology, 69*(4), 557-568.
- Rasmussen, K. (1984). Nonverbal behavior, verbal behavior, resume credentials, and selection interview outcomes. *Journal of Applied Psychology, 69*(4), 551-556.
- Reis, H., Wilson, I., Monestere, C., Bernstein, S., Clark, K., Seidl, E. et al. (1990). What is smiling is beautiful and good. *European Journal of Social Psychology, 20*(3), 259-267.
- Riggio, R. & 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, 18*(4), 331-348.
- Spangler, L. (1995). Gender-specific nonverbal communication: Impact for speaker effectiveness. *Human Resource Development Quarterly, 6*(4), 409-418.
- Wild, B., Erb, M., Bartels, M. (2001). Are emotions contagious? Evoked emotions while viewing emotionally expressive faces: Quality, quantity, time course and gender differences. *Psychiatry Research, 102*(2), 109-124.