Priming effects on non-verbal communication and one's perceived performance specific to the job interview.

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COMPULSORY DECLARATION:

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this research report from the work, or works of other people has been attributed, cited and referenced.

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ABSTRACT

The purpose of this study was to expand the empirical research surrounding non-verbal communication within the employment interview. A cross-sectional experiment was administered at The University of Witwatersrand in order to investigate whether or not confident body language could be primed. 53 Psychology 1 students from WITS volunteered to take part in the study. However the findings revealed insignificant results.

Aim

The aim of this study is to further the empirical landscape in examining if an individual can be <u>primed</u> to illustrate ideal <u>body language</u> in the <u>employment interview</u> that will, in turn, yield a desirable impression.

Rationale

In order for organisations to ensure successful growth and to meet the demands of the fast-changing business environment they need to attract, retain, and motivate a skilled workforce (Georgsdotti & Getz, 2004). Consequently it becomes a necessity for H.R personal to make use of the various H.R tools they have at their disposal, such as recruitment, selecting and hiring to effectively generate a pool of accomplished people to fill the appropriate roles within the organisation and thus achieve labour productivity (Graves & Karren, 1996). In particular the employment interview, an established selection technique, has been found to be positively related to organisational performance. The aim of the interview is to hire the right employee for the right job and the right organisation. It allows the employer the opportunity to grasp an idea about the prospective employee's knowledge, attributes, skills, and personality. Concurrently the prospective employee receives the opportunity to obtain information about the organisation and its culture and thus deduce if the organisation is right for them (Graves & Karren, 1996).

However the interaction that takes place (usually in the form of standardised questions) represents but only a mere fraction of the true evaluation of the prospective employee (Rosenfeld, 1997). Expanding on this idea, a person's first impression can be the difference between being employed and continuing the search for a job. Studies have shown that there is a strong correlation between the interviewee likability and whether or not they shall get the job. Furthermore it has been found that 90% of one's initial opinion is formulated within the first four minutes of meeting someone. Therefore it appears essential to explore the volatile nature of the employment interview and dissect the components that constitute the employment interview's subjective nature (Rosenfeld, 1997).

Impression management thus comes to the fore in ensuring an applicant portrays a notable employment interview and is thus remembered by the interviewer (whose discretion dictates hiring decisions) (Ellis, 2002). The focus shifts to investigating the most ideal way to ensure a good first impression and an appropriate area to investigate is nonverbal cues (Grahe & F.J,

1999). Nonverbal behaviour is pertinent in any social context as it has a considerable impact (60-80%) on all communication (Radford, 1998).These nonverbal cues can be categorised into sub-categories, such as facial expressions, gestures, tone of voice and body posture, and each has a contribution to the message that is being communicated. Body Language one facet of nonverbal language, has received a great deal of attention although primarily on the theoretical side demonstrated by the forgoing (Radford, 1998).

A particular branch of empirical studies that have been administered fuelled the motivation for this study: it looked primarily at high and low power poses as a priming tool to initiate good and bad employment interview performance respectively (Carney D. C., 2010). However in this study the converse will be attended to - in that it prioritises observing the body language that emerges in the employment interview after a particular priming effect has occurred. Subsequently, this study not only attends to the empirical gap inherent in the field on body language but further investigates the phenomenon of priming.

Literature Review

" I am convinced that nothing we do is more important than hiring and developing people. At the end of the day you bet on people, not on strategies "

- *Lawrence Bossidy (Former COO of GE and author)(1935)*

An enormous amount of significance is bestowed upon the employment interview as a selection technique, and in particular the interviewers, to ensure satisfactory hiring decisions are made (Graves & Karren, 1996). The inherent nature of an employment interview generates a platform for social interactions to take place in which an applicant's communication skills, interpersonal skills, motivation and personality can be assessed. It usually takes place in the form of an unstructured or structured interview (Schmidt, 1998; & Wiesner, 1988). The difference between the two lies in the amount of control the interviewer has over the questions being asked – in an unstructured interview the interaction that follows is more informal with no set questions or agenda fuelling the on-going assessment. The interviewer is free to ask or enquire about any aspect pertaining to the applicant allowing for a greater amount of discretion. The interview is more subjective in nature, where two different applicants can be asked completely different questions. Moreover the assessment of the applicants performance is made after the interview is concluded based on the subjective judgement of the interviewer. Conversely, structured interviews have a set format, in which pre-determined questions are asked that correlate with the particular job at question. The same questions are applied across all interviews and the interviewer has little control over the interview structure. Additionally a standard scoring format is used to assess the applicants. Both methods help facilitate the interviewer in obtaining important information about the applicants. However they differ in benefit and limitations (Shmidt, 1998; & Wiesner, 1988).

Unstructured interviews have low predictive validity due to the fact that the questions asked are often not job-related and the answers subsequently provided to such questions lack reliability because no standard form of scoring is available (Hunter, 1984). They are however easy to administer and save a great deal of money. Structured interviews on the other hand boast greater predictive validity (due to the pre-job analyses to the questions asked) and higher reliability (due to the consistency of questions asked to each applicant and the well-defined rating scale). Although this study draws upon structured interviews owing to its overarching benefits, interviews in general need to be interrogated in order to investigate the notion of impression management (IM) appropriately (Hunter, 1984). However in order to

corroborate the use of IM and explore its function within an organisational context one must first refer to the notion of person-organisation fit and scrutinize its role in IM.

Dawis, 1992; French, Caplan, & Harrison, 1982; Kristof-Brown, Zimmerman, & Johnson, 2005; Muchinsky & Monahan, 1987 posit that the congruency that exists between a person's personality, goals, and values and those of an organisation will dictate their person-organisation fit. Furthermore according to Lewin (1951) an individual's person-organisation fit is often perceived as positive or negative having substantial effects in either direction. For instance a person who perceives a positive person-organisation fit tends to perform more effectively on the job and shows signs of positive engagement eliciting suitable alignment with the organisations vision and success (Sutarjo, 2011). The spill over of positive engagement manifests in the form of job satisfaction, organisational commitment, employees productivity and organisational success to mention a few. Therefore it can be said that the notion of ensuring a positive perception of the organisations values and culture is critical and thus appropriately finds its place in organisational theory. Furthermore the nature of the person-organisational fit insinuates a two-way process, whereby the employer deduces whether or not the applicant is suitable for the organisation (Sutarjo, 2011). Accordingly, in the competitive environment that is the labour market, prospective employee's need to portray desirable attributes in order to be considered an attractive option (Ellis, 2002). An applicant is thus inclined to be viewed in a favourable light by attempting to control their impression on others by highlighting their strengths and virtues whilst 'covering up' their deficiencies. Ipso Facto satisfying the employer's requirement of meeting an ideal person-organisation fit. The employment interview thus becomes a forum in which both parties formulate this idea about one another and indulge in impression management (IM) (Ellis, 2002).

> " *You never get a second chance to make a first impression* "
>
> *- Will Rogers(1879-1935)*

As mentioned earlier, the employment interview is home to a strategy in which each party "tries to control the impression others have of them: their behaviour, motivations, morality and personal attributes like dependability, intelligence, and future potential" (Rosenfeld, 1989, 1991; Rosenfeld et al., 1994b). The basic notion behind impression management is to be viewed in the most positive light and minimise negative attributions as explained earlier.

However the phenomenon deserves adequate attention particularly in the employment interview due to the social nature and 'high stakes" inherent to the forum. Each party partakes in manipulative and sometimes deceptive behaviour in order to manage a favourable impression. Employers however hold the majority of the power in the employment interview and thus indulge in less IM than the applicant. A possible explanation can be accredited to the competitive nature of the labour market fuelled by the scarcity of available jobs especially within South Africa (25.5% unemployment rate in 2012) (StatsSA, 2012). The onus therefore lies on the shoulders of the applicant to portray a desirable impression and indulge in impression management. This study will consequently focus on the applicants' ability to exhibit a favourable impression.

According to Fletcher (1989, p. 273) in order for the applicant be successful, the applicant must walk a "fine line" being "confident but not brash, polite but not sycophantic, lively and interested but not voluble or manic, sufficiently nervous to show an appreciation of the importance of the occasion but not visibly anxious throughout". Herein it can be said that the particulars of IM and the influence it holds within the confides of the employment interview are not only relevant but fundamental in shaping the relationship that exists between the interviewer and the applicant (Rosenfeld, 1997). Before a better understanding pertaining to the execution of IM is explored, the volatile nature of the employment interview warrants greater attention.

In spite of the evidence that structured interviews are more effective than unstructured interviews, organisations continually turn a blind eye and engage in informal interviews (70% of organisations use unstructured interviews to facilitate hiring decisions) (Wiesner & Cronshaw, 1988). As briefly mentioned earlier, the idiosyncratic judgements of the interviewer have an enormous bearing on hiring decisions. In a study by Graves and Karren (1992), 29 recruiter's decision processes were explored at a large service company. The purpose of which: to locate the sources of idiosyncrasies that exist amongst interviewers. The results show numerous sources of variance amongst recruiters that include different beliefs about the characteristics that make an ideal applicant, which characteristics deserve greater attention and personal preferences (Graves & Karren, 1996). Congruent with the idea of personal biases amongst interviewers, Schmidt (1976) highlights interviewer's subsequent judgements and the underlying theme that each interviewer holds a different position on the "ideal" applicant evident in 9 different studies (Posthuma, 2002). The aforementioned studies

thus shed light on the volatile nature of the employment interview and the need for successful IM.

> " *Our bodies change our minds, and our minds can change our behaviour, and our behaviour can change our outcomes* "

- *Amy Cuddy(2010)*

It has been established that the employment interview can be an ambiguous and an uncertain social situation and the IM that it elicits has typically focused on verbal behaviours of the applicant. According to Ellis, West, Ryan, & DeShon (2002) applicants often indulge in two tactics of IM namely ingratiation (behaviours that are designed to evoke interpersonal liking and attraction) and self-promotion (behaviours intended to evoke attributions of competence). Ingratiation might include opinion conformity to the interviewer whereas self-promotion is more individual-based for instance taking credit for a positive outcome (even if the credit is undeserved). Kacmar, Delery, & Ferris (1992) found in their study that applicants were more successful in IM if they focused on themselves than if they focused on ingratiation tactics.

Although the above two tactics have differential effects on interviewers perceptions they fall within two broad categories namely verbal and nonverbal behaviour (Ellis, 2002). Ingratiation and self-promotion constitute the majority of the verbal behaviour category and typically past research has followed suit. Although there seems to be dearth literature in the nonverbal category and moreover IM the research that does exist should not go ignored (Ellis, 2002). Several Authors, the likes of Archer & Akert, 1977; Berry, Pennebaker, Mueler, & Hiller, 1997; Gifford & Hine, 1994; Mehrabian & Ferris, 1967 and Mehrabian & Weiner, 1967 have undertaken to examine the relative importance of each category and although collectively inconsistent results arose, it set the initial framework for nonverbal behaviour. Nevertheless, the overarching findings revealed that both verbal and nonverbal behaviours have a hand in the communication of interpersonal information, however verbal information facilitates accuracy of comprehension and nonverbal channels deliver the message faster. Hence nonverbal communication is as important as verbal communication in a social context reminiscent of the employment interview (Grahe & F.J, 1999).

Upon exploring previous research into nonverbal communication a noticeable pattern emerges. The predominant amount of nonverbal IM research has focused exclusively on facial cues such as smiling and eye contact. For instance Anderson and Shackelton (1990) found an obvious difference in the frequency of eye contact and positive facial expressions between applicants who were accepted versus rejected in a graduate selection interview. Young and Beier (1977) and Forbes and Jackson (1980) found similar results, that is; applicants that engaged in more eye contact, smiling and head movement were rated more favourably. Furthermore in a confederate interviewee study confederates were instructed to demonstrate inhibited or uninhibited non-verbal communication, the results exclusively supported the uninhibited non-verbal communication evident in the fact that no confederate interviewee that produced inhibited non-verbal communication were recommended for a second interview (McGovern, Jones & Morris 1978,1979). Levine & Feldman (2002) reported that relatively smaller changes in non-verbal behaviour can have considerable effects on interviewer's ratings; they further found that gender of the interviewee plays a moderating role between non-verbal behaviour and likability. Men and woman who displayed similar high level of eyes contact (60%) were rated on their likability differently in favour of woman (Levine & Feldman, 2002). However the overarching theme is evident: non-verbal language has significant effects in the employment interview and on the interviewer's judgement. This study purports to address the non-verbal cues that have not received as much attention namely body movements and gestures.

The fundamental concept in social science is Power, in the same sense that Energy is the fundamental concept in physics... The laws of social dynamics are laws which can only Be stated in terms of power - *(*Russell, 1938, p. 10).

In order to appropriately locate the aim of this study, we draw from Gifford, Fan Ng, and Wilkinson (1985) findings that social skills, desirable for most job positions, were successfully communicated by interviewees through non-verbal cues in the interview such as rate of gesturing, time spent talking and formality of dress. The underlying notion that supports the aforementioned claim has its roots in power differential on three basic levels (Carney, Hall, & LeBeau, 2005). The first level of power elucidates its influence from the actual measurable content conveyed from non-verbal body language across spectrums of voice (tone, pitch, volume and tempo); facial expressions (eye contact, smiling, facial cues);

and body movements (gesturing, posture, manipulators and illustrators). These observable exponents are independent indicators to which social power manifests. The second level of power unearths from the interaction between the non-verbal behaviour and perceived impressions of social power. A great deal of literature has already been covered on this level and finds its place in the social conundrum of impression management. The last level, beliefs about social power, holds a societal influence bound by stereotypes and notions of what one would expect people with varying social to act. Belief and perception studies have found a complimentary relationship in that the belief of what social power constitutes prescribes one's perceptions and informs our knowledge base of how people think about each other and about nonverbal behaviour (Carney, Hall, & LeBeau, 2005). The three aforesaid levels thus play an integral role in the interaction that ensues between interviewer and the interviewee and the outcome of the interview in which IM is mediated as an amalgamation of all three levels.

Subsequently power becomes a critical attribute that is central to the applicant is impression (Lammers, 2013). Interviewers use the inference of power as a valuable predictor of a more confident, self-assured and commanding employee. Furthermore it has been found that feeling more powerful leads to dominant non-verbal behaviour. If an applicant is able to portray desirable and powerful non-verbal behaviour in the employment interview they stand a good chance of being perceived favourably in the interviewer's eyes increasing their probability of being hired (Gifford, 1985; & Lammers, 2013).

In so far, Henley (1977) posits strongly asserted that social power was related to non-verbal behaviour. With Henley's (1977) assertion in mind and upon reviewing past literature, we can unearth the favourable non-verbal body language that should be present in the employment interview in order for positive IM to ensue. The following findings were furnished by (Gifford et al, (1985); Pease (1988); Fast (1994); Carney et al, (2005); Huang et al, (2011)) and explicate powerful non-verbal body language. The foregoing Authors found significant associations between social power and direct head and trunk orientations; a forward and erect carriage posture; above average eye contact; crossing of the legs and arms; open hand gestures and illustrators (gesturing that is aligned with the message being communicated). Conversely, non-verbal language that telegraphs anxious and uneasy impression include: adverted eye, head and trunk orientation; slouched carriage posture; fiddling; hands hidden and manipulators (self-touching). To this end a comprehensive notion

of what denotes powerful and confident nonverbal language can be surmised. However a vacuous inquiry exists into what can be done to ensure ideal non-verbal behaviour is maximised within the employment interview yielding a positive impression?

Alluding to the above concern, an implicit memory phenomenon comes to the fore in establishing a possible solution in the form of context-based association between stimulus and response – known as priming (Klempin, 2011). A symptom of classical conditioning, priming (to prime = to prepare, to instruct in advance) incorporates the association between two events better explained wherein event A increases the probability of the occurrence of event B. Event A is usually known as the prime whereas event B assumes the desired target response (Klempin, 2011). The former presupposes the notion that within numerous occasions, our judgements, feelings and behaviours are not driven by active thinking and reasoning but rather a memory phenomenon described above (Loersch & Payne, 2011). In so far seemingly inconsequential and logically irrelevant cues or primes give rise to decisions and responses that presumably appear independent.

Several target responses have unearthed significant findings, for instance when exposed to the concept of hostility (e.g. "hit", "punch", "aggress") certain subsequent behaviour can be predicted for instance: Meyer & Schvaneveldt (1971) induced participants to identify a gun quicker that those who were not primed, Higgins, Rhodes & Jones (1977) noted that primed participants perceived others as more hostile. Carver, Ganellen, Froming & Chambers (1983) and Todorov & Bargh (2002) observed more extreme responses where behavioural and goal priming encouraged more hostile behaviours such as behaving in a hostile manner and further seeking out hostile opportunities. It can be said that the nature of the second event or activity constitutes the degree to which the prime is activated. Better said, the requirements of the second event after such priming, determines whether the prime affects the persons thoughts feelings or behaviour (Loersch & Payne, 2011). The nature of the employment interview thus holds behavioural implications aligned within this study.

However it is the prime and its delivery that embody the true origins of the target response. Gollwitzer et al (2011) appropriately outlines the three interactive types of priming that will be considered in this study. The first type is known as concept priming (direct priming) and "causes people to act in line with activated concepts" (Klempin, 2011, p. 6). This requires the participants to be exposed to a strong semantic prime in the initial stage of the experiment

followed by observing the subject's behaviour after the prime has been administered in deducing any effects. For instance Bargh et al (1996) illustrated this type of priming in a study that measured subjects walking speed following a semantic prime to the concept of 'elderly'. The findings showed significant difference in walking speed to the detriment of the participants who were primed i.e. they walked slower.

The other two variants of primes include Subliminal Priming and Supraliminal Priming. These forms of priming require more subtle stimulus to elicit a desired response (Klempin, 2011). Subliminal Priming demands that certain criteria have to be met before the prime can be effective: firstly, the stimulus presented must be conceived subconsciously by the subject, second, the inception of the prime should encompass only a short period of time and lastly the prime needs to be covert in that it should be cloaked by an arbitrary and content-free impulse (Klempin, 2011). According to Neumann (1990) 'subliminal activation' rooted in sensory information is the foundation for motor responses in which the perceptual stimuli has its affect without necessarily being consciously perceived (Eimer & Schlaghecken, 2003). Similarly supraliminal priming involves subjects who are confronted with a prime while elaborating on a certain task that blinds the subject from the prime and consumes their full attention. Although the prime can be detected consciously (highlighting the fundamental difference to subliminal primes) the expectation, in accordance with the pseudo-task, envisages participants to adapt their behaviour in relation to the prime (Klempin, 2011).

Essentially the former three variants of priming are part of one shared paradigm known as 'masked priming' and prescribe the concealed prime in order for the target response to follow (Eimer & Schlaghecken, 2003). Higgins (1996) elucidates that the strength of the prime not only depends on how concealed the prime appears but also on the sensory information and its link to the desired response. Herein the preceding challenge raises awareness as to the prime's validity with regard to the target desired. With regards to the study at hand the prime should intrinsically correspond with the desired target to elucidate confident body language and thus relate to power. Suitably the construct of confident non-verbal language has been explored to gain an accurate link between the prime and the targeted response (Higgins, Knowledge Activation: Accessibility,Applicability and Salience, 1996). Higgins (1985) prior study into the strength of the prime revealed that the frequency and recency are determinants of strength. Participants were presented with a two trait constructs (adventurous and reckless) within a scrambled Sentence Test, however one trait was primed more frequently than the

other and the other more recently. The seemingly unrelated task after the prime revealed that if the task was administered right after the prime, the recency effect would govern behaviour, however more consistency was found if the task occurred at a later stage (Higgins, Bargh, & Lombardi, Nature of Priming Effects on Categorization, 1985). The implication of such informs the methodology herein.

However priming experiments have not provided unconditional findings for instance Bargh and Colleagues (1996) study mentioned earlier has recently been scrutinised. (Bower, 2012). The basis of this scrutiny came from cognitive psychologist Stephane Doyen of Belgium after he released conflicting results, to that of, Bargh et al (1996). In a replicated study, Doyen (2012) only found the slow-walk effect when the students recruited to lead the research knew about the priming and thus expected a result. Doyen thus concluded that the results evoked by priming an 'elderly' concept were not attributable to the actual prime but rather to the inadvertent encouragement unconsciously delivered to the participants by the research leaders, either in the form of unintended body language or facial expressions. However, Bargh et al (1996) still stands strong by the results of the original experiment as they claim "We went out of our way to control for experimenter effects in our 1996 studies" (Bower, 2012, p. 7). According to the researchers none of the experimenters knew the aims of the study nor saw any material i.e. scrambled sentence test, because participants were handed them in a sealed envelope. What's more Doyens (2012) replicated study was never published but rather posted online in PLos ONE contributing to the controversy.

With this discrepancy in mind the literature review rightfully plateaus in addressing the primal power of supraliminal priming to evoke a desired response in behaviour. We thus ask if an applicant will demonstrate desirable nonverbal behaviour once primed by an arbitrary task priming confident and powerful esteem inducing greater performance in the employment interview.

Methodology

Research Questions

1) Does priming affect body language?

2) Does body language affect perceived performance?

3) Does body language mediate the effect of priming on perceived performance in the job interview?

Methods (Approach)

Sample and Sampling

South African students form the basis of the target population in which the sample was chosen. The sample consisted of 53 full-time Psychology 1 students from the University of Witwatersrand (age 18-22 years old). First year students in Psychology are appropriate for the study because they are an accessible sample and as a requirement for course credit all first years must take part in a research study owing to the ease of access for my sample as well as commitment to the experiment at hand. Students from the psychology 1 who are willing and want to volunteer will make up the sample. They will be awarded 1% course credit for participating in the study.

Owing to the voluntary nature in acquiring the sample not all students had an equal chance to be representative of the population hence Non-probability Convenience sampling was used (Rosenthal & Rosnow, 1991). Furthermore it can be argued that a student sample is a valid representation of the target sample as students will be aware that they will take part in employment interviews once they leave school and/or in acquisition of bursaries or part-time jobs throughout school. Actual jobseekers would be a more appropriate sample; however in acquiring such a sample certain issues may arise with regards to the cost of administering an experimental design as well as ethical concerns in interfering with the actual process resulting in a pragmatic procedure.

Procedure

Students who have registered for Psychology 1 at the University of Witwatersrand were approached during their break and informed about the study. They were informed that they are expected to participate in a study during the duration of the year for course credit (1%). No more information was given about the study as a measure of deception was required in order to ensure the participant was blind to the experiment encouraging accurate results. The aforementioned deception can be overlooked in an ethical sense for two reasons: firstly no harm would be of result of such deception and further the outcome of the study surpasses the minor deception in furthering our knowledge regarding non-verbal behaviour.

The 53 students who volunteered made up the sample. These students were given a letter briefly explaining the study (not the full details making up the deception) and considerations for the study additionally the date and the time of the study was arranged via email (See Appendices).

Students arrived individually at an arranged venue and time where they were required to initially fill in a demographic questionnaire as well as a video consent from (See Appendices). They then were briefed on the details of the job interview and what it encompasses (job description: they are applying for a vacancy as a research assistant) as well as the meaning of an arbitrary task as a 'selection technique' to appropriate their suitability for the job. Participants were informed that if they performed well in the interview they would be considered for the job reemphasising the legitimacy of the employment interview in the minds of the participant. Ethical considerations could arise with regards to false promises and further deception however in order to achieve a level of validity such deception was necessary. This will be expanded upon later in this section.

Each participant was then randomly assigned (flipping a coin) to an experimental group (primed) or the control group (Neutral) in ensuring random assignment was achieved. The prime was concealed in the words of a Scrambled Sentence Test (Srull & Wyer 1979). The Scrambled Sentence Test was constructed mechanically and administered on a lap top using an automated programme engineered by my supervisor Mike Greyling. Participants were presented with five scrambled words and 5 empty templates with a timer on the side conveying the amount of time they had to complete the question. Each participant was guided through a sample question in order to ensure that the participant understood how to use the

program and complete each question. Upon completion the participant was presented with either a result of 'Above Average' or 'Below Average' for the respective Experimental and Control Group. Following the test the participant was instructed to fill out a single-item self-worth test as a manipulation check for the priming.

Next the participant was lead into another room, neighbouring the first room where the arbitrary task took place, for the interview stage. The confederate administered a structured interview asking a total of 10 questions for example "What parts of your degree do enjoy the most"?; "Give me an example of a work situation in which you were not proud of your performance. What did you learn from this situation"? And "Have you had any previous experience in any form in research? If yes please state what experience"? (See Appendices).

The confederate was instructed to only ask the questions presented to him as well as only use basic primes to elicit further information if the question was not answered properly, for instance "Could you expand on that idea" or "what do you mean by..." The interview was recorded from two angles: one side view and one front view. The participant was informed that the video recording is merely for documentation purposes. Once the interview was concluded the confederate interviewer was instructed to fill out the two perceived performance scales.

Lastly the participant was debriefed by me about the actual aims of the study, ensuring no real effects of priming may have occurred .Certain measures were also taken to ensure the participant were not lead to believe the interview was legitimate in the debriefing following the experiment (See Ethics Section). The debriefing followed a structured script for each participant that outlined the studies true intentions: special attention was afforded to the clarification of the participant's performance in the selection test. Participants were informed that the results were predetermined and were not in any way a true reflection of the participant's abilities. It is important to reflect on the debriefing process as a security to ensure the well-being of the participants after the experiment was administered.

Scales of Measure

Priming (IV)

In order to operationalise priming an arbitrary cognitive task was administered on a computer in which a prime was embodied within the task. A variation of the Scrambled Sentence Test

(Srull & Wyer, 1979) was used to make up the arbitrary task (See Appendices). The task required the participants to grammatically construct a four word sentence from a five word scrambled item. In doing so, the participants had to drag the word they wanted to use into one of four free tile spaces to make up their sentence. Whilst completing each item a time bar was present on the side counting down to zero - this ensured a measure of performance for the Scrambled Sentence Test and stopped when a valid sentence was entered. The confident group received a greater amount of time than the control group. There was a total of 30 items, 15 for each group. 10 items in the experimental group contained words synonymous to the concept of 'confidence' (experimental group) the remaining 5 were neutral so as to not make the prime too explicit or known. The control group had 15 neutral words with respect to 'confidence'. 66% of the experimental group items were embedded with the following synonymous primes acquired through http://thesaurus.com/browse/confident?s=t. (Roget's 21st Century Thesaurus, 2013). They included Certain, Strong, Assertive, Fearless, Heroic, Bold, Gung Ho, Forward, Secure and Poised. The corresponding stimuli in the control group included 15 random concepts. Each question presented to the participant contained five blank windows in which the participant was expected to drag the five scrambled words provided into the appropriate windows to make up a valid sentence. The only way the participant was able to progress through the Scrambled Sentence Test was if the sentence was accepted by the programme. Different variations of valid sentences were programmed into the Scrambled Sentence Test enabling the programme to differentiate between an accepted or rejected sentence. If the sentence was rejected the programme did not allow the participant to progress further to the next question until a valid sentence was finally entered. As mentioned above, a time bar was presented on the side of the screen for each question acting as a score count. The aim of the timer was to set a test environment that probes the participant's engagement in the test reaffirming the criteria for a semantic prime. Once the participant completed the test a pop up window with either above average or below average appeared for the experimental group and control group respectively. Herein the Scrambled Sentence Test assumed the role as an arbitrary task masking the true functionality behind the prime in delivering words synonymous with the concept of confidence as well as reaffirming the tests implied effects for each group (See Appendices).

Self-Worth (Manipulation Check)

In order to check that the priming evoked the expected manipulation in the participant i.e. was the IV accurately manipulated: participants were asked to fill in a single-item self-worth

scale: "At present, I feel like I am a person of worth"? It was scored on a 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The score is expected to be consistently high for the experimental group.

Non-verbal Behaviour (DV)

Non-verbal behaviour was operationalised by decoding each video-recorded participant in the structured interview. Initially the prevalence of the non-verbal behaviour was coded however the resultant data appeared too rigid to which a new technique in coding was chosen in observing the frequencies of the behaviour. The structured interview was administered by a confederate (interviewer) was blind to the manipulation (priming) so as to not confound the results in any way. The confederate was further instructed to follow a structured script in asking the participant (interviewee) questions (See Appendices). The Body Action and Posture Coding System (BAP) (Dael, 2012) was used to assist in decoding the video footage of the participant's nonverbal behaviour. The BAP covers three main nonverbal behaviour metrics to facilitate categorising its codes. The codes describe anatomical articulation (which part of the body is actually moving) according to well-established kinesiological standards; forms of movement (how part of the body is moving i.e. direction); and actions on a functional level: which include three behavioural classes (emblems, illustrators and manipulators) (Dael, 2012). To further make sense of what constitutes 'confident' nonverbal behaviour, past literature was consulted to construct a relevant memo giving the coding of the BAP meaning. This cross-check enabled a more reliable analysis enriching theory with practice.

The memo was coded using observed frequencies, i.e. how many times the interviewee completes a certain gesture or body movement. Drawing from past literature we can attempt to construct an appropriate indication grid of what constitutes confident body language and what portrays a subtext pertaining to the contrary i.e. apprehensive body language.

For instance, the juxtaposition of previous literature by Pease (1988) and Fast (1994) points to several universal subtexts that non-verbal behaviour can offer:

- An erect carriage when walking and sitting sends a subtext of control and take-charge element and certainty.
- Facing another person directly with your eyes, face, shoulders and upper body sends a subtext of undivided attention.

- Sitting down and crossing your legs towards another person portrays strength.
- Steepling your fingers (holding your hands together at chest height with the fingers touching and pointing upward) while sitting back and listening sends a subtext of confidence. The higher the hands the greater the confidence up to a certain point (the chin).
- Counting things off your fingers sends a subtext of confidence.
- Rubbing your hands briefly sends a subtext of confidence.
- Open-hand gestures around chest height reveal subtext of seriousness and importance.
- Maintaining a higher degree of eye contact shows attentiveness, holding eye contact for too long insinuates dishonesty.
- Slouching or hesitant walking portrays a subtext of insecurity.
- Fiddling or playing with objects or one's own face/hair sends a subtext of nervousness.
- Closed arms i.e. crossing one's arms indicates disagreement. Although this must be interpreted carefully because it is a comfortable position. Indicators of the contrary are apparent in the tightness or tension in the rest of the body.
- Turning the body away, avoiding eye contact and facing sideways as one talks sends a subtext of reluctance to be present.

The meaning of the non-verbal behaviour above has been disseminated from research with videotapes taken during psychological therapy sessions (Fast, 1994). The conjunction that transpired between theory and recorded anatomical movements lead to the development of an observation grid (See Appendices). This observation grid provided the necessary qualitative framework in which the participant's body language could be converted into frequencies for the appropriate analyses to commence. Non-verbal behavioural categories were disseminated and split into three categories below:

1) Orientation (Power Category)

Head Orientation: The face is orientated towards the interviewer.

Trunk Orientation: The trunk is orientated towards the interviewer.

Carriage Posture: Spine movement towards an erected position – the spine is straitened so the trunk is more erect or upright relative to the anatomical standard position.

Eye Contact: The gaze is directed and maintained towards the interviewer.

2) Power Non-verbal Language

Smiling: Unconscious or conscious manipulation of the facial nerves that produces and maintains a smile.

Illustrators: A conversational action that supports accompanying speech by illustrating the rhythm or content of a verbalised message.

Open Hand Gestures: Movement of the hands with open palms supporting speech and meaning.

Closed Arms: Both arms held across each other in a standard position.

Closed Legs: One legs crossed over the other facing the interviewer.

3) Powerless Non-verbal Language

Fiddling: to make trifling or fussing movement with the hands.

Manipulators: An action in which one part of the body manipulates another body part or an object for some type of body contact.

Hands Hidden: Covering the hands, usually sitting on the hands.

Coding Videos

The process of coding the videos was standardised with the introduction of coding rules for this particular study. The observation rules were as follows:

Frequencies Scores: The counts of frequencies of the individual behaviour were calculated upon two fundamental rules.

i) Behaviour is counted as a frequency when the behaviour begins and is returned to its standard position.

ii) A count is given every 10 consecutive seconds the behaviour occurs. I.E: if the participant produces an open hand gesture for longer than 10 seconds the count will be 2 and will increase every 10 seconds the behaviour persists.

Perceived Performance (DV)

Perceived performance was operationalised through the use of a self-constructed performance criteria (See Appendices) a two-item overall performance measure (See Appendices). The first scale represented the interviewer's subjective appraisal of the interviewee regarding their research capabilities. Two items were used to supplement this scale namely "Would you say the interviewee has adequate experience with research?" and "Would you say the interviewee will make a good research assistant?"

The second scale pertains more to the research at hand in extracting the appraisal of confidence inherent in the job interview between the confederate and the participant. In so far, the interviewer was asked to rate the interviewee on a 3-item scale regarding their subjective appraisal of their confidence presented as: "When you close your eyes, can you picture this person in the job?", "How well do you think the person interviewed?" and "Would you say the interviewee is a confident individual?" The same confederate was used throughout so as to standardise the appraisal of each participant. It must be stressed here that the confederate was blind to the condition ensuring validity in the study was adhered to with regard limiting confounding variables. With the omission of the knowledge surrounding the study the confederate was compelled to base their appraisal primarily on the overall perception of performance rather than just the telegraphed non-verbal language apparent.

Research design

The research consisted of a cross-sectional research as it was administered on a single group of students at one point in time, this is appropriate for the study because data collection will occur at one time. (Rosenthal & Rosnow, 1991). The study followed a true experimental design which is appropriate for the study because a control group was present, the IV in this case, priming, was manipulated by use of The Scrambled Sentence Test and randomization was imposed offering strong support for causality. Nevertheless the design did represent problems with ecological validity in that we can say with not one hundred percent confidence that the behaviours presented in the study would ensue in a real life employment interview within an organisation. The nature of a "laboratory setting" may not allow participants to exhibit "normal" behaviour presenting concerns for ecological validity (Rosenthal & Rosnow, 1991).

External Validity also posed a concern within the parameters of an experimental design in that Psychology 1 students are in their first year of university and do not necessarily feel a need to get a job or invest in the on-going interactions evident in the employment interview. Such a threat to external validity may weaken the generalizability of the study to an organisational context and thus restrict inferring the results upon other populations.

Data Analyses

Independent sample T test were used for statistical analyses of the main relationship (Priming, Perceived Performance) and the secondary relationship (Priming, Body Language) in the study. This is an appropriate parametric test as there are two groups and all assumptions have been met (Manipulation of the IV (priming), Control Group, and Randomization). To elicit further information regarding the individual significance of each body language to perceived performance a Stepwise Logistic Regression was administered.

To explore if body language mediates the relationship between priming and interview performance Hierarchical Regression Analyses was intended. However due to the fact that the main relationship between priming and perceived performance was not significant this analysis was not permitted.

Ethics

Before the study can go ahead permission from the WITS Ethics Committee was granted (Rosenthal & Rosnow, 1991). I then approached both the humanities department and the Psychology department and requested permission which was duly granted as well to use the full-time students in my sample. Subsequently, a clearance certificate was a granted by the Human Research Ethics Committee: Protocol Number: MORG/13/007 IH. During the break of a psychology 1 class I explained to the students about the study and request volunteers (See Appendices).

All participants were provided with a participant information sheet with all the relevant information pertaining to the study such as what the study is about (however only a limited amount of information will be afforded so as to not confound the results), confidentiality and anonymity, possible risks and benefits and contact details for the researcher (See Appendices).

Additionally, participation was voluntary and participants were informed that they may withdraw from the study at any time and that they will not be penalised for withdrawing. Furthermore, all data is being kept confidential and stored in a safe place.

Participants were debriefed about the true aims and purpose of the study after taking part so as to enlighten them about the deception that is required to further knowledge and research on nonverbal language in the employment interview.

The results of the study are accessible to those who participated and any other person who might benefit from the study. They are available per request. Participants were also informed that the data collected will not be used for any other purposes besides the necessary research in question.

Results

The following data analysis will assist in providing a suitable response to the research questions posed at the beginning of this paper, subsequently allowing an appropriate conclusion.

a. General Descriptive Statistics

Table 1 exhibits the appropriate descriptive statistics for each demographic variable present in the sample:

Table 1

Summary of Descriptive Stats

		N	Mean	SD	Min	Max
Age	Control Group	26	19.65	2.057	18	33
	Experimental Group	27	18.85	1.032	18	20

Note: SD= Standard Deviation. N*number of participants

Table 1 illustrates the sample size acquired (26 + 27 = 53), where the minimum age was 18 and the maximum 33 years of age, however the mean age (19.25) is fitting seeing as though Psychology 1 students made up the sample. Table 2 displays the frequencies of the ethnicity of the participants across both groups

Table 2
Frequencies of Ethnicity

	Control Group		Experimental Group	
	Frequency	Valid Percentage	Frequency	Valid Percentage
Black	12	46.2	9	33.3
Coloured	2	7.7	1	3.7
Indian	1	3.8	1	3.7
White	11	42.3	16	59.3

It is apparent from the above table that Black and White Females were predominant in both groups. White participants made up the majority of the sample (50.9%), with Black Females with next majority (39.6%). Indians and Coloured Females made up the remaining 9.5% of participants in this study. All participants were female and in their first year of study in Psychology 1 at The University of Witwatersrand.

Table 3a
Inter Rater reliability – Cohen's Kappa

Measure of Agreement (Kappa)		N of Valid cases
Original	.412	90
Revised	.732	90

Table 3b
*Rater1*Rater 2 Crosstabulation*

	Rater 2			
	1	2	3	Total
Rater 1				
1	19	1	1	21
2	3	7	3	13
3	3	2	51	56

| Total | 25 | 10 | 55 | 90 |

Table 3a reveals a moderate to strong Cohen's Kappa score amongst the two ratters. Initially the measure of agreement did not satisfy a confident inter ratter reliability measure (Kappa: 0.412) prompting a review and discussion amongst the two ratters. The aim of the discussion was to unearth any inconsistencies within each ratters coding process. The discussion revealed that there was a confusion between two similar categories, that of, 'open hand gestures' and illustrators'. Due to their similar nature and their placement under the same 'Power" category these two non-verbal behaviours were collapsed into one category to accommodate for the coding confusion. Once this was completed the measure of agreement naturally adjusted to an acceptable measure. The differences that did exist following the adjustment said above amongst the two ratters can be seen in Table 3b.

Assumptions

An independent-samples T test was used to analyse the main effects, requiring all parametric assumption to be met. It is apparent below that all assumption were met appropriating the use of a parametric test i.e. at least interval data, independence of observations, no outliers, normality and homogeneity of variance. The response format in tangent with the coding described earlier allowed for interval data, the tables below surmise the remaining assumptions:
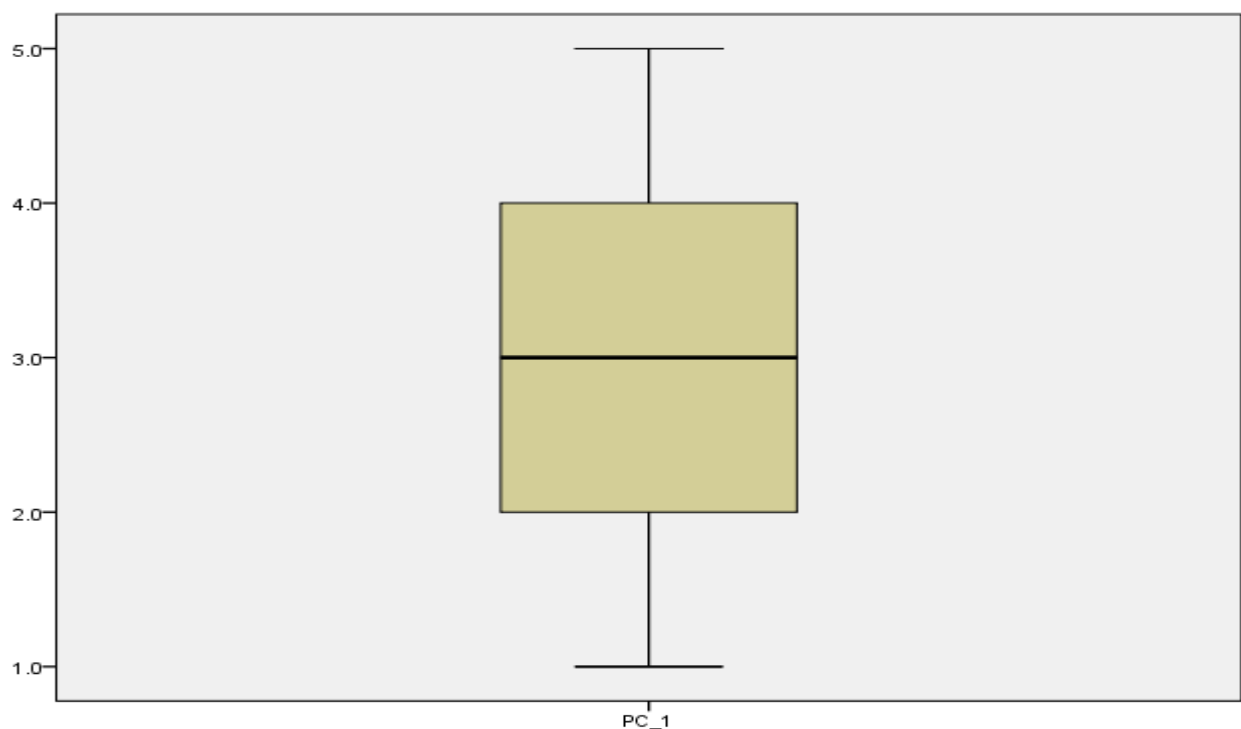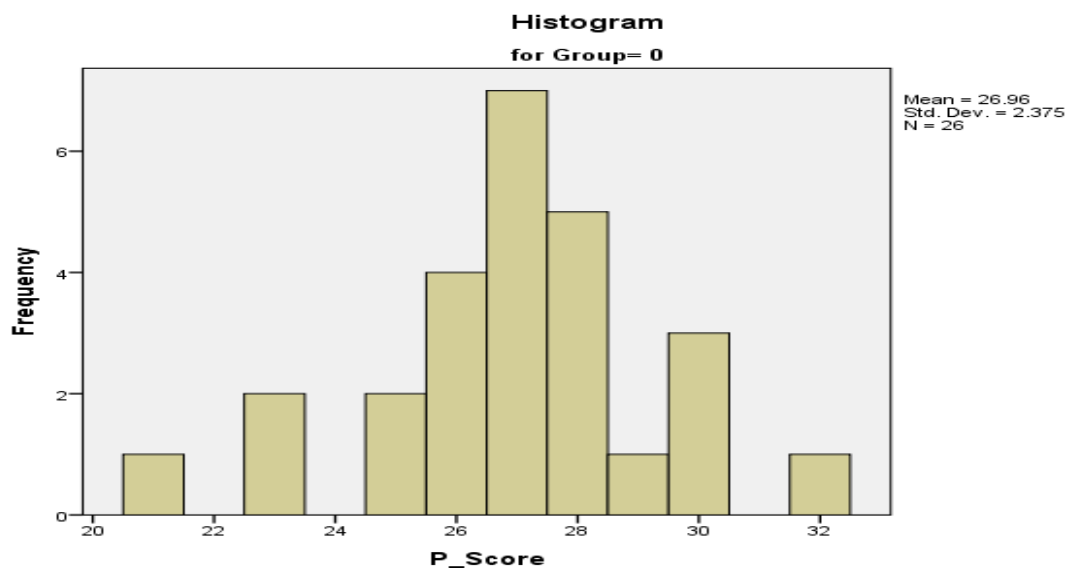

Note: The Boxplot above asserts that no extreme outliers existed within the data.
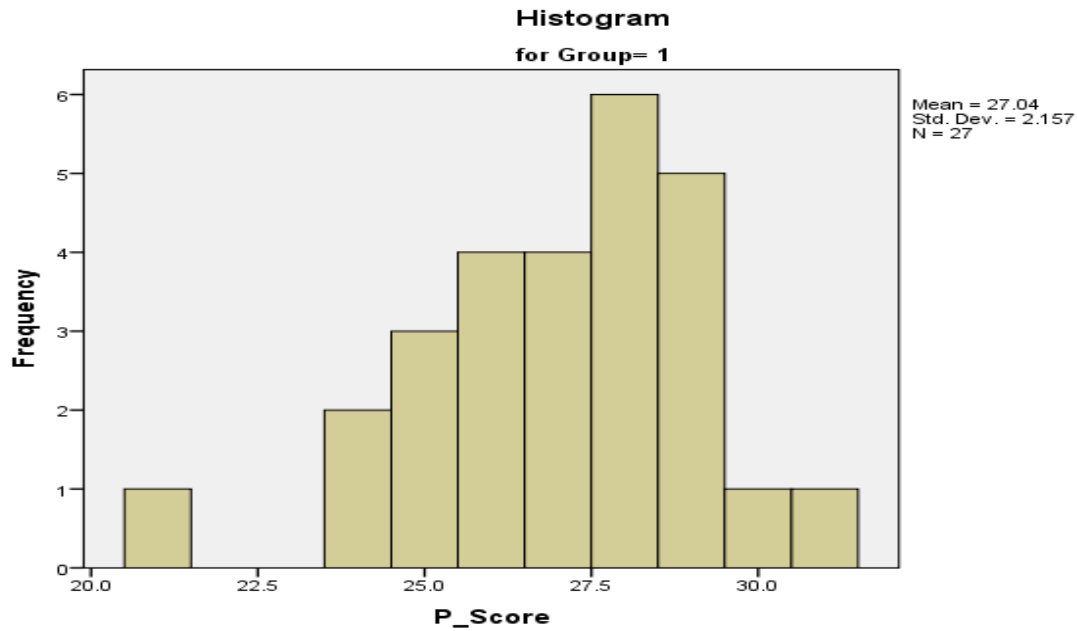
Table 4
Test for Normality

Perception	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
0	.248	26	.000	.812	26	.000
1	.219	27	.002	.893	27	.009
Power						
0	.160	26	.084	.953	26	.277
1	.154	27	.100	.952	27	.241

Note: Lilliefors Significance Correction; df*degrees freedom Sig.*Significance

In testing whether the sample follows a normal distribution or not the Kolmogorov-Smirnov and Shapiro-Wilk Tests were consulted. Both these tests provide adequate measures, Shapiro-Wilk especially appropriate for smaller samples. The Kolmogorov-Smirnov looks to compare the dataset acquired against an ideal distribution calculated from the dataset itself. The distribution for the power scores matched that of the general population and thus normality can be assumed: $(P > 0.05; 0.084 > 0.05$ & $P > 0.05; 0.100 > 0.05)$. However the perception scores show otherwise: $(P < 0.05; 0.000 < 0.05$ & $P < 0.05; 0.002 < 0.05)$. A lack of normality can subsequently be overlooked as an independent-samples T test is robust to deviations in normality. Central limit theorem lends a hand in correcting the distribution that is decidedly non-normal with a sample of 53. The following Histograms offer further support for the use of parametric testing. Hence, we now move on to the next assumption, homogeneity of variance:

Histogram
for Group= 0

Mean = 26.96
Std. Dev. = 2.375
N = 26

Histogram for Group= 1

Mean = 27.04
Std. Dev. = 2.157
N = 27

The relevant T tests were administered duly reported below: Homogeneity of Variance – Table 6b: Levene's Test for equality of variance suggests that equal variance can be assumed (P = 0.172, P>0.05) Perceived Score (P=0.453, P>0.05) and Power Score (P=0.995, P>0.05). Furthermore the data is at least interval which allows us to proceed with the Independent T test:

Table 5a

Group Statistics: Manipulation Check

Group	N	Mean	Std. Deviation	Std. Error Mean
'Control'	26	3.50	.906	.178
'Experimental'	27	4.26	.712	.137

Group Statistics: Perceived Score

'Control'	26	3.35	1.231	.241
'Experimental'	27	3.26	1.163	.224

Group Statistics: Power Score

'Control'	26	26.96	2.375	.466
'Experimental'	27	27.04	2.157	.415

Table 5b

Independent Sample T Tests

	Levene's Test of Equality of Variance		T test for Equality of Means						
	F	Sig.	T	Df	Sig (2 tailed)	Std. Error Difference	95% C.I of the Difference		
							Lower	Upper	
Manipulation Check	1.919	.172	-3.40	51	.001	.223	-1.208	-.311	
Perceived Score	.573	.453	.264	51	.793	.329	-.573	.747	
Power score	.000	.995	-.121	51	.904	.623	-1.326	1.175	

It is apparent that the prime hidden within the Scrambled Sentence Test did have a significant effect on the participants in the experimental group (P=0.001, P<0.05). However further investigation revealed no relationship between the prime and an improved perception of performance (M = 3.26, SD = 0.712), t (51) = 0.264, p = 0.793, P>0.05) as well as any significant result on actual body language (M = 27.04, SD = 2.157), t (51) = -0.121, p = 0.904, P>0.05).

1) Does priming affect body language?

Alluding to the first Research Question whether priming has an effect on body language, an independent t test was run following all assumption being met. Table 5b asserts that no significant relationship exist i.e. no difference in body language was found between the control group and the primed experimental group. The insignificant result thus prompted the appropriate calculations in Cohens D and Confidence Intervals of the effect size in pursuit of the source of such results. This is imperative as we need to calculate the magnitude of the result with reference to the point estimate and its practical significance. With a Cohens D of - 0.03 we can conclude a small effect size (0.02) with confidence intervals (with 95%

confidence) ranging from $-1.326 < D < 1.175$ (Very Strong). We can thus affirm that the small effect size shows that the insignificant result obtained was a function of the design. Herein close attention should be given to the priming process administered in the study. Introducing a Pilot study prior to the Experiment could offer information that can help mould the final prime to yield a more reliable result.

2) Does body language affect perceived performance?

Returning to Table 4b it is apparent that there was no significant relationship between priming and perceived performance i.e. there was no perceived difference between the groups with regards to their perceived performance. Amid the statistical significance of the manipulation check we can conclude that there is no relationship between body language and perceived perception. With a Cohens D of 0.07 we can further conclude a small effect size of 0.04 with confidence intervals (with 95% confidence) ranging from $-0.573 < D < 0.747$. It is apparent that we know little about the true effect of the body language as the wide interval prescribes more information to elicit enough information about the effect. The aforementioned prompts further investigation into whether any individual body language carried important significance within the power score:

Table 6

Summary of Stepwise Regression

Predictor	B	SE B	e	df	Sig	Exp (B)	95% C.I for EXP (B) Lower	Upper
Trunk Orientation	-.809	1.756	.212	1	.645	.445	.014	13.912
Eye contact	-.486	.730	.443	1	.506	.615	.147	2.574
Carriage Posture	-.179	.817	.048	1	.826	.836	.169	4.145
Smiling	.061	.383	.025	1	.874	1.063	.501	2.252
O.H.G	.076	.408	.035	1	.852	1.079	.485	2.400
Illustrators	-.241	.391	.379	1	.538	.786	.365	1.691
Crossed Legs	.019	.365	.003	1	.959	1.019	.499	2.083
Crossed Arms	1.169	.737	2.518	1	.113	3.220	.760	13.648
Fiddling	.197	.388	.257	1	.612	.197	.569	2.606
Manipulators	.277	.406	.465	1	.495	.277	.595	2.922
Hands Hidden	.201	.537	.140	1	.708	.201	.427	3.499

Note: N=53. Variable (s) entered on step 1: Trunk Orientation, Head Orientation, Eye Contact, Carriage Posture, Smiling, Open hand Gestures, Illustrators, Crossed Legs, Crossed Arms, Fiddling, Manipulators, Hands Hidden.

Table 6 reflects the predictive scores for each independent body articulation. It is apparent that none of the nonverbal behaviours categorised above were significant following the entry stepwise logistic in turn providing limited evidence for any variance from the initial prime.

3) Does body language mediate the effect of priming on perceived performance in the job interview?

The most generic form of mediation exists when an active-organism intervenes between stimulus and response. Hence the relationship between two variables is mediated by a third intervening variable known as the mediator. According to path analysis put forward by Baron & Kenny (1986 pp. 1176) three criterion must be present in order for mediation analysis to follow: 1) "variations in the levels of the independent variable significantly account for variations in the presumed mediator i.e. between the prime and the body language" 2) "variations in the mediator significantly account for variations in the dependent variable" (body language and perceived performance) and 3) when the two paths above are controlled for, the previously significant relation between the independent and dependent variable (prime and perceived performance) is no longer significant. Due to the previous non-significant results the proposed mediation analysis is not viable as there is no significant relationship between the prime and body language, nor body language and perceived performance (Baron & Kenny, 1986).

Discussion

The aim of this study was twofold in the sense that is purported to expand the empirical landscape within the field of nonverbal-language and further settle an on-going feud within closer circles pertaining to the phenomenon of priming. The former endeavour revealed insignificant results as it provided limited evidence to support the initial research question: Does priming affect body language? However the study does provide some constructive contribution that appeals in support of Stephane Doyen's replicated study of Bargh and Colleagues (1996) famous supraliminal study. Herein the manipulation check on whether the prime in the form of the Scrambled Sentence Test had any effect on the participant's confidence deserves further investigation. However we will first take a closer look into the aforementioned insignificant results pertaining to the overarching aim of this study.

Accordingly first, we looked at whether or not confident body language could be primed and further inspire actual change in one's body language that reveals power ideal to the employment interview. In so far no supporting evidence was found. Next we looked whether or not the perceived performance could be primed. Once again insignificant results arose providing limited evidence that the prime could have explicit and authentic influence on the participants. We additionally looked at the relationship between actual body language and

perceived performance. However insignificant results were tabulated. Lastly we proposed to look at the mediation effect of body language on priming and perceived performance, however the mediation analysis was rendered void due to the insignificant result of the main relationship in question i.e. prime and body language.

In articulating the appropriate explanation for the insignificant results, we may look to the theory put forth or towards the methodology. Focusing on the former and according to Gifford et al, (1985); Pease (1988); Fast (1994); Carney et al, (2005); Huang et al, (2011) if an applicant is able to portray desirable and powerful nonverbal behaviour in the employment interview they stand a good chance of being perceived favourably in the interviewer's eyes increasing their probability of being hired. Further literature points towards certain articulators that are useful in portraying a confident and assured presence rendering a positive outcome. The foregoing authors have presented findings that support the notion that social power and direct head and trunk orientations; a forward and erect carriage posture; above average eye contact; crossing of the legs and arms; open hand gestures and illustrators (gesturing that is aligned with the message being communicated), however the result report to the contrary. Pease (1988) and Fast (1994) particularly emphasise an individual's posture and their trunk and head orientation in sending a strong assertive subtext. An erect carriage when walking and sitting sends a subtext of control and take-charge element and certainty whereas facing another person directly with your eyes, face, shoulders and upper body sends a subtext of undivided attention. However the study at hand didn't reveal similar findings. Possible explanations point towards the participants within the sample illustrating similar orientations with regards to their trunk and head positions and thus blurring distinguishable differences and further their inherent subtexts. This enquiry demands further interrogation as its implications could provide possible reasons why no distinguishable results ensued.

It befalls upon a validity concern to expiate the insignificant results reported above. Herein the sample is interrogated. 53 Psychology 1 students at the University of Witwatersrand took part in this study, the importance of which is contained in both the size of the sample as well as the inherent characteristics. The sample at hand comprises adolescents who are fresh out of school and have limited experience with employment interviews. It is therefore appropriate to assume that this sample might not perceive the artificial employment interview administered in the study as relevant nor significant enough which offers a reasonable rationale behind the absent confident body language. The homogenous sample that is Psychology 1 students

might not have recognised the weight the employment interview holds within the selection process and hence overlooked the anxiety provoking process. Ipso facto, revealing no change in their natural body language. This can be assumed as both population validity and ecological validity are of concern as the sample and the setting did not appear to approximate the real-world setting that is being examined within the domain of employment interviews. Internal Validity also comes to the fore in providing a reasonable explanation as to why the sample did not portray distinguishable confident body language,

In accordance with the former enquiry with regards to the insignificant results the manipulation check is next interrogated. We turn to whether or not the prime actually worked. At face value and within the realm of statistical endeavour it seems the prime was significant as the primed group reported a statistically greater level of self-worth. This supports Bargh and Colleagues (1996) claim that supraliminal primes may have a tangible effect, however the lack of evidence implicit within the relationship between the prime and actual body-language convolutes such a claim. Additionally the control group also reported considerable self-worth advocating further suspicion that supports Doyen's counterclaim. However Parducci (1965) Range Theory comes to the fore in offering a counter argument to the high scores evident in the Control Group. The theory posits that when people evaluate a certain stimuli, i.e. in this case the Scrambled Sentence Test, they identify what they believe to be the most and least values and thus chooses a value that coincides with either past experiences or from the range of stimuli in the current choice context. It can thus be deduced that participants in the control group reflected context-based scores implicit to themselves (Parducci, 1965).

Further interrogation is directed towards the potency of the prime. This purports to both the actual prime hidden within the Scrambled Sentence Test and further the measurement of its effect namely the Self-worth Scale. Although the manipulation check was statistically significant, one can question the potency of the effects it supposedly elicited. The effect size provides moderate evidence for the prime's potency limiting the strength of the prime hidden within the Scrambled Sentence Test. This needs to be acknowledged as a possible explanation as to why a person's self-worth did not manifest as a projection of their body language. A possible in-congruency may also be the validity, in particular construct validity, of the single item Self-worth Scale to provide comprehensive results of the participant's self-worth or confidence at the time rendering the manipulation check potentially inaccurate.

Another methodological concern that could offer an explanation into the insignificant results obtained draw from Carney, Halls & LeBeau (2005) three basic levels of power. The first level of power elucidates its influence from the actual measurable content conveyed from non-verbal body language across spectrums of voice (tone, pitch, volume and tempo); facial expressions (eye contact, smiling, facial cues); and body movements (gesturing, posture, manipulators and illustrators). This initial level presupposes the perception of one's power owing to actual representation of the three spectrums above. The majority of the Power score calculated through the self-developed observation grid (past literature and BAP inspired) focused on the last spectrum of body movements and touched on facial expressions. However facial cues were ignored as well as the whole spectrum of voice. The omission of such spectrums paints a partial picture of the participant's power portfolio, a limitation of the study at question. Future Research should possibly investigate the holistic model of communication across speech, tonality and body language.

The other two levels of power offer further insight as to the insignificant results on a theoretical echelon. It has been established that perception of power and beliefs of social power play an interactive role which prescribes peoples knowledge base regarding power differentials. With regards to the study at hand, the confederate's perceptions scores and in turn his impression of the interviewer could have been confounded by personal beliefs and perceptions learnt throughout his life. Although the same confederate was used throughout, blind to the experiment, over the course of the month in which the experiment commenced, certain beliefs or perceptions could have informed his impression. An argument can be made that ecological validity was thus compromised.

It can also be argued that the participants were aware of the prime hidden within the scrambled sentence test thus revealing inaccurate results. In retrospect, a further manipulation check scale could have been developed in order to confirm whether or not the prime was discovered.

 With regards to the mediation analysis the base conditions were not met hence the appropriate analysis could not commence (Baron & Kenny, 1986).

Limitations

The sample acquired in this study poses another potential limitation. The sample was made up of first year psychology students from the University of Witwatersrand. Hence the population validity appears to be weak as students are not representative of an employee thereby hampering generalisability of any potential results. Although an argument could still be made for the samples relevance to the population, with regards to students interviewing for part time jobs or bursaries acquiring a more relevant sample i.e. part-time student with work experience or actual employee in an organisation would appear more appropriate.

Recommendations for Future Research

Although the study produced insignificant results it holds greater implication for future studies. The use of the observation grid as a reliable scale could be investigated further providing the field of nonverbal behaviour a stable construct to measure the difference between confident and anxious body language.

Another future recommendation looks to the replication of the study at hand, however with more backing with regards to funding and resources. With this being said organisations and employees susceptible to the employment interview could form the basis of the sample in turn providing more accurate results.

Conclusion

The study produced no evidence to support the research questions. The theory points to an overwhelming amount of support for the role of nonverbal behaviour in telegraphing a confident impression. However the study at question falls short in following suit yet provides the framework in which nonverbal language can be investigated further.

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Appendix I – Questionnaire

About Yourself (Please do not out your name on any part of the questionnaire)

1.) Gender

☐ Male

☐ Female

2.) Age (in years):

_____

3.) Year of Study:

_____

4.) Ethnicity

_____

Thank you for completing the questionnaire. Your result will be anonymous and the information that you have provided will be kept confidential.

1.) Student Number:

_____

Please detach the bottom half of this form and hand it into a separate box labelled "Course Credit"

Scrambled Sentence Test (Experimental Group)

Make a grammatical sentence as quickly as possible out of each set of sentences. You don't have to use all 5 words in your sentences.

1. people strong only we are

2. certain am yes I completely

3. ahead and tall stand look

4. gung ho attitudes young people have

5. to a become star poised

6. enough feel you bold do

7. stay close fearless the warriors

8. give push a forward me

9. an assertive be try person

10. ahead and tall stand look

11. drink a for go lets

12. the door red rusty is

13. is my on phone constantly

14. I was kid when a

15. mind to open travelling your

Scrambled Sentence Test (Control Group)

Make a grammatical sentence as quickly as possible out of each set of sentences. You don't have to use all 5 words in your sentences.

1. him was worried she always

2. from are Florida oranges temperature

3. ball the throw toss silently

4. shoes give replace old the

5. he observes occasionally people watches

6. be will sweat lonely they

7. sky the seamless gray is

8. should now withdraw forgetful we

9. us bingo sing play let

10. sunlight makes temperature wrinkle raisins

11. leaves in the autumn fall

12. you run jump or can

13. the night hoots at owl

14. and breath calm stay please

15. see go movie lets a

Appendix III – Self-Worth Test

Question 1

At present, I feel like I am a person of worth"?

 1 - strongly disagree to 5 - strongly agree.

Appendix IV: Interview Schedule

Interview Schedule

Please ask the following question as written:

Question 1

Have you had any previous experience in any form in research? If yes please state what experience.

Question 2

Give me an example of a work situation in which you were not proud of your performance. What did you learn from this situation?

Question 3

What quality or qualities do you have that would enhance our staff?

Question 4

What do you consider to be your strengths and weaknesses?

Question 5

When have you worked well in groups?

Question 6

Have you ever experienced conflict? If so how did you resolve this dilemma?

Question 7

How do you deal with stress?

Question 8

What parts of your degree do enjoy the most?

Question 9

What unique trait do you have?

Question 10

What do you do in your free time?

Appendix V: Self-constructed Performance Criteria

Question 1

Would you say the interviewee has adequate experience with research?

Yes/No

Question 2

Would you say the interviewee will make a good research assistant?

Yes/No

Appendix VI: Overall Performance Scale

Question 1

How well do you think the person interviewed?

1 – Very Bad to 5 – Very Good

Question 2

When you close your eyes, can you picture this person in the job?
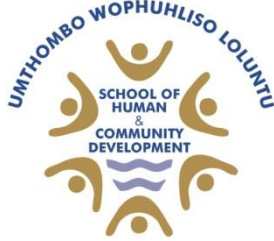
Yes/No

Question 3

Would you say the interviewee is a confident individual?

Yes/No

Appendix VII: Body and Posture Rating Scale

Appendix VIII: Video Consent Form

Psychology

School of Human & Community Development

University of the Witwatersrand

Private Bag 3, WITS, 2050

Tel: (011) 717 4500   Fax: (011) 717 4559

Permission to tape interview

Participant

I, _____ have read the information provided to me. I understand that I am not obligated to give consent for the interview to be video recorded and that all video recordings will be kept in a safe and secure place at the disposal of the researcher.

I hereby give permission for my interview to be video recorded.

Signature: _____ Date: _____

Appendix VIIII: Access Letter

School of Human & Community Development

University of the Witwatersrand

Private Bag 3, WITS, 2050

Tel: (011) 717 4500

Fax: (011) 717 4559

To whom this may concern

My name is Kyle Bloch and I am presently completing my Masters Degree within the Department of Psychology at the University of the Witwatersrand. In the fulfilment of this degree my area of research is designed to further the empirical landscape in examining if an individual can be primed to illustrate ideal body language in the employment interview that will, in turn, yield a desirable impression.

In order to conduct my research project, I will need to obtain access to a sample of first year university students. This letter is asking for permission to be granted access to use the first year university students at the University of the Witwatersrand.

In terms of Participation Anonymity and Confidentiality:

Participation is voluntary. However, those that do complete the questionnaire will be credited with 1% toward one's term mark.

Please note that a student number will have to be given in order to obtain the extra percentage toward one's term mark. However, be assured that the data will solely be used for academic purposes and will remain strictly confidential. Please note that the individual results will not be made available to any of the lecturers or anyone within the university other than myself and my research project supervisor.

The research will take approximately 30 minutes to complete. Your participation in this study would be greatly appreciated. This research will contribute toward understanding what can be done, both for an interviewer and

interviewee, to detect or represent ideal impressions within the employment interview respectively.

Informed consent is assumed by the mere act of pitching up for the research. However, participants will be able to withdraw from the study until such time as they submit the questionnaires.

The research study will be conducted under the supervision of Mike Greyling, a lecturer in various research courses in the Psychology Department at the University of the Witwatersrand. Please contact me should you have any further questions. If you wish to meet with me for a discussion regarding my research, please feel free to contact me and I will meet with you.

Kind Regards

Kyle Bloch   Mike Greyling

Organisational Psychology Masters Student   Lecturer

University of the Witwatersrand   University of the Witwatersrand

Email: kbloch4@gmail.com   Email:Michael.greyling@wits.ac.za

Appendix X

School of Human & Community Development

University of the Witwatersrand

Private Bag 3, WITS, 2050

Tel: (011) 717 4500

Fax: (011) 717 4559

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The research will take approximately 30 minutes to complete. Your participation in this study would be greatly appreciated. This research will contribute toward understanding what can be done, both for an interviewer and interviewee, to detect or represent ideal impressions within the employment interview respectively.

Informed consent is assumed by the mere act of pitching up for the research. However, participants will be able to withdraw from the study until such time as they submit the questionnaires.

The research study will be conducted under the supervision of Mike Greyling, a lecturer in various research courses in the Psychology Department at the University of the Witwatersrand. Please contact me should you have any further questions. If you wish to meet with me for a discussion regarding my research, please feel free to contact me and I will meet with you.

Kind Regards

Kyle Bloch   Mike Greyling

Organisational Psychology Masters Student   Lecturer

University of the Witwatersrand   University of the Witwatersrand

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