

## **The effects of attractiveness of writer and penmanship on essay grades**

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This study examines the effects of penmanship and the physical attractiveness of the writer upon essay assessment. An essay which was always exactly the same in content was assessed by a large number of school teachers and by some students. Some of the assessors received the essay in typed form, for some it was written in good handwriting and for some the handwriting was poor. A photograph of the supposed author of the essay was attached to it via a report card. This portrait photograph was of a male or a female who was either highly physically attractive or rather unattractive. It was found that when the authors were female the ratings given to the essays were influenced by the factors of penmanship and attractiveness. No such effects were found if the authors were male. The implications of such findings for educational and employment application settings are discussed.

The aim of the present study was to see whether the attractiveness and penmanship of essay writers had an effect on British assessors. If such effects exist, then this has implications not only for the educational setting but also for other situations such as the screening of job applicants before interview. On many occasions when more than just a few applicants apply for a post, only some of these will be called to interview, this selection being performed on the basis of the job application form (which may well be in the applicant's own handwriting with a photograph attached).

It is a common observation that good handwriting enables one to discern easily what the writer is trying to say whereas poor handwriting makes reading rather more difficult. One would have thought that such differences would have stimulated research into the effects of penmanship upon the marks awarded for pieces of written work. Surprisingly, it seems that few investigations have ever been undertaken concerning this topic.

In 1927 James found that teachers gave higher grades to an essay written in good handwriting and in 1929 Sheppard observed a similar tendency for essays written in good handwriting to receive higher grades than those written in poor handwriting. Forty years later Chase (1968) again found quality of penmanship to have a significant influence upon the marks awarded to essays, as did Briggs (1970). In this latter experiment (which was conducted in Britain) ten different essays were chosen from a large number written by schoolchildren. A range of ten contrasting handwriting styles was chosen from those of other children and the ten handwriters reproduced each of the ten essays. Each assessing teacher received essays in all ten of the handwritten forms with the content of each essay being different. Briggs found that not only did the content of the essays have a significant effect upon the marks awarded but the handwriting (which was pre-selected to range across a quality continuum) also had a pronounced effect upon the grades given. (Unfortunately no analysis of the interactive effects of these two factors was undertaken.) Briggs con-

cluded that 'handwriting does influence the assessment of essays', and he calls for more research to be undertaken.

In 1974 Landy & Sigall asked male students to evaluate an essay and its writer. Copies of two essays were used, one essay being good in terms of handwriting and quality, the other being poor in both respects. Attached to the essay was a photograph of the supposed writer. Landy & Sigall found that the less attractive was the person in the photograph the lower were the evaluations of the essay. The physical attractiveness variable had a greater impact when coupled with the poor essay than with the good one. Physically unattractive 'writers' were not discriminated against when they were believed to have written the good essay but their marks were significantly lower than those for the attractive 'writers' of the poor essay.

The above piece of research can be criticized on several grounds, not least of which is the fact that the essay markers had little or no experience of this kind of activity. One might expect experienced teachers to be less influenced by seemingly extraneous factors such as a photograph of the writer. Clifford & Walster (1973) gave teachers a nursery schoolchild's report card to which was attached a photograph of the child. The teachers were asked to rate the child and it was found that though the report card always said exactly the same thing the more attractive the child in the photograph (established by prior study) the more favourable were the teachers' evaluations of IQ, peer relationships, likely future educational accomplishments, and parents' attitudes towards school.

Ross & Salvia (1975) gave teachers a fictitious psychological report card of a 9 year old child with an IQ of 78, the sex and photograph (physical attractiveness) of the child being varied for different teachers. The teachers were informed that the purpose of the study was to 'determine the nature of teacher judgements' and to obtain 'a better understanding of how teachers view the information contained in a psychological report'. They were asked to indicate on six-point scales the strengths of their agreement with each of four questions concerning: (i) placement of the child in a special class; (ii) whether further evaluation might reveal an even lower IQ; (iii) whether the child will have difficult peer relations; and (iv) whether the child will experience academic difficulties. The analyses revealed a significant effect of attractiveness on each of the four questions. The teachers indicated that, 'Placement in a special class was more appropriate for unattractive children; further psychological evaluation would reveal lower functioning by unattractive children; unattractive children would experience more difficulties in peer relationships and in academic work'.

Rich (1975) gave experienced teachers a child's report card to which was attached a photograph of the child. The teachers were asked to assess the child's likely personality and to say how likely it was that the child had been the naughty one in class and, if so, what punishment should be given. Rich found the personality assessments to be significantly influenced by physical attractiveness and, as would be expected, the nature of the report card greatly influenced the teachers' decisions. If the report card was good then little punishment was advocated. However, if the report card was bad the teachers who had the unattractive boy photographs were more inclined to suggest harsher punishment; the attractiveness of the female photographs not having a significant effect.

Dion (1972) gave female students written details of a child's behaviour together with a photograph of the child. The description of the misbehaviour was always exactly the same so that the only thing which varied was that some students had

photos of attractive children and some photos of unattractive children. It was found that the students were much more lenient towards the attractive child. Those who had photographs of the attractive child said that the misbehaviour was likely to be only a temporary thing whereas those with the unattractive photo frequently said that they believed it likely that the child was often naughty, was antisocial, and should be severely punished.

The above studies of physical attractiveness (which were all conducted in North America) do suggest that this variable can have an influence in the educational setting; and the studies of dating behaviour, of advertising, and of simulated juries, mentioned in a previous article (Bull, 1974) also suggest that it often can have powerful effect. Few British studies have examined the physical attractiveness variable.

It was noted above that Clifford observed teachers to indicate that they believed attractive children to have better peer relationships. It could well be that attractive persons develop greater social skills as they develop greater self-confidence, and a consequence of this might be that unattractive people do not acquire the necessary social skills to make others want to get to know them when in fact they may have many things to offer. Roff (1961) found a positive relationship between early peer-group social behaviour and later adult social adjustment; and since Salvia *et al.* (1975) have shown that physically attractive children are the most popular with their peers, it is likely that they will become the more socially skilled adults. Here first impressions are important. It is much more difficult (and therefore many people do not bother) to get to know someone who is shy and lacks confidence. Thus attractiveness comes, via the individual's life experiences, to be coupled with other positive attributes and so a self-fulfilling prophecy exists. One important reason for studying the physical attractiveness variable is for society to be aware of its operation. When this becomes so, then perhaps we will not favour those who by chance are the more attractive. Should this be the case then physically unattractive people will not suffer the rejection they frequently report. In only a few contexts does having a peculiar face help (e.g. being a comedian), in most it hinders (as reported to the first author by such persons themselves).

Dipboye *et al.* (1975) examined the importance of applicants' sex, physical attractiveness and scholastic achievement in the evaluation of job applications. Thirty experienced personnel interviewers and 30 undergraduates studying industrial management each received 12 completed application forms (plus photographs of the applicants) for the post of the head of a section in a large department store. Dipboye *et al.* varied these applications in terms of the sex, scholastic achievement and physical attractiveness of the applicant. The assessors were asked to evaluate each of the applications and it was found that scholastic achievement, physical attractiveness and sex of applicant each had a significant effect on judged suitability for the post, with the latter two variables not being so powerful as the former. This was the case both for the experienced assessors and for the students. Dipboye *et al.* make the point that these findings may be a function of the job description which specified 'a high degree of interpersonal skill'.

A similar experiment was conducted by Schuler & Berger (1977). Here 80 personnel managers each assessed one application for a post in a personnel department. The applications varied in the sex, physical attractiveness and qualifications of the applicant, and the assessors were required to indicate (on a six-point scale) whether they would recommend employment. They were also required to rate on a

number of scales the applicant's personality. The data obtained on these scales were factor analysed and two main factors appeared; a 'liking' score and an 'achievement motivation' score. For the decisions concerning employment recommendation both qualifications and physical attractiveness had significant effects, as they did for 'liking' and 'achievement motivation'. No effects of applicants' sex were found. This study again demonstrates that the physical attractiveness of the photograph on a job application form can influence employment decisions. However whether, as Dipboye *et al.* pointed out, this effect is restricted only to certain posts is not known. Furthermore, the above studies were artificial in the sense that the assessors knew that no real-life decisions would be made as a result of their judgements. Nevertheless, until data are available from actual real-life situations it remains a possibility that physical attractiveness and penmanship may affect employment and educational decisions.

#### METHOD

It must be admitted that a major problem in this area of research is that of being able to carry out realistic studies. Some of the investigations mentioned so far have been reasonably similar to life itself but others have often asked inexperienced people to do things they do not normally do. When the present authors decided to investigate the effects of physical attractiveness and of penmanship it was considered desirable to conduct a life-like experiment. Consequently the persons who acted as essay markers in the present experiment were mainly schoolteachers. Of the 72 people who graded the self-same essay two-thirds were experienced teachers and the remainder were adult students (not of psychology) studying the subject with which the essay was concerned (approximately half the markers were male).

In the present experiment the essay which was to be assessed *was always exactly the same in content*. Some markers received a copy of it written in good handwriting, some in poor handwriting (which was legible), and for some it was typed. Good and poor handwriting were predetermined by asking a number of people to judge 10 examples of handwriting. The overall 'best' and 'worst' handwriting received significantly different scores ( $P < 0.01$ , using Kendall's coefficient of concordance) and these were used in the present study. To the essay was attached a report card which gave the writer's name and address together with details of past educational achievement. This report card was always the same for all markers and they were told that they were provided with it to give them some idea of the academic standard of the writer. A photograph was stapled on the report card and a paper clip attached the card to the essay. The paper clip, which it was necessary to remove in order to gain access to the essay, was placed across the photograph and in this way it was hoped that the markers would notice the photograph without the experimenters' placing undue emphasis upon it. The only thing which varied on the report card was the photograph. This was either of a male or a female (age approximately 20 years) who, again by prior determination, was either attractive or unattractive (for male and female photographs rated by both males and females,  $P < 0.01$ ). Thus for the male and female authors there were six experimental conditions, the essay being typed or written in good or poor handwriting, and for each of these the writer was either attractive or unattractive.

Each of these versions was examined by six markers, and all the 72 markers were told that this was an experiment to see how well people agreed when marking the same essay. No marker could see the photograph or presentation style of any other

essay. It is worth noting here that inter-marker agreement was explicitly mentioned to the markers. The markers were asked to read the essay and then to rate it using nine-point scales on four dimensions (i.e. style, ideas, creativeness and general quality). They were also asked to rate the writer for intelligence, sensitivity, talent and general ability.

## RESULTS

The data for the male (Table 1) and female authors (Table 2) were analysed separately since many studies have shown (Berscheid & Walster, 1974; Rich, 1975) that the sex of the stimulus person may be an important consideration when looking at the effects of physical attractiveness. Analyses of variance were performed to examine the effects of attractiveness of writer and presentation of essay upon each of the eight judgemental dimensions. For the male authors no significant main effects or interactions were found for any of the judgements. For the female author conditions no significant main effects were present for the attractiveness variable.

Table 1. Mean ratings awarded to each male author essay condition for each judgemental dimension (a high score indicating a favourable impression). The figures in parentheses are the standard deviations

Essay condition	Male writer					
	Attractive			Unattractive		
	Typed	Good	Poor	Typed	Good	Poor
Style	5.3 (2.6)	4.8 (1.2)	6.0 (0.6)	5.5 (2.1)	6.2 (1.6)	5.7 (1.8)
Creativity	4.5 (2.1)	4.3 (1.8)	4.8 (1.8)	3.7 (2.1)	4.3 (2.0)	5.0 (2.3)
Ideas	5.8 (2.5)	5.5 (2.7)	5.0 (1.9)	5.5 (1.6)	5.3 (1.9)	5.8 (2.6)
General quality	5.7 (2.5)	5.8 (2.4)	5.5 (1.6)	5.8 (1.8)	6.0 (2.3)	5.8 (2.3)
Intelligence	7.0 (0.9)	7.0 (1.4)	6.3 (1.2)	6.2 (1.3)	6.0 (2.4)	6.2 (2.2)
Sensitivity	5.5 (2.5)	5.8 (0.8)	6.0 (1.2)	4.3 (1.0)	5.2 (1.8)	5.0 (1.3)
Talent	6.5 (1.8)	5.8 (1.2)	6.2 (1.7)	5.8 (1.6)	5.7 (2.0)	6.3 (1.8)
Overall ability	7.3 (1.2)	6.5 (1.1)	6.0 (1.6)	6.0 (1.6)	6.0 (2.2)	6.3 (2.3)

Table 2. Mean ratings awarded to each female author essay condition for each judgemental dimension (a high score indicating a favourable impression). The figures in parentheses are the standard deviations

Essay condition	Female writer					
	Attractive			Unattractive		
	Typed	Good	Poor	Typed	Good	Poor
Style	6.0 (2.5)	6.5 (1.2)	4.2 (1.6)	7.0 (1.1)	5.3 (0.8)	3.9 (1.7)
Creativity	3.5 (2.6)	5.5 (1.8)	5.0 (2.0)	5.2 (1.9)	3.8 (1.2)	4.0 (1.4)
Ideas	5.2 (1.9)	5.8 (1.0)	5.0 (1.1)	6.8 (1.6)	4.5 (1.8)	4.2 (1.0)
General quality	5.3 (1.9)	6.5 (0.8)	4.0 (1.3)	7.0 (1.3)	4.8 (2.2)	3.7 (1.0)
Intelligence	5.7 (1.9)	7.2 (1.0)	6.7 (1.5)	7.3 (0.9)	5.7 (1.2)	5.7 (2.0)
Sensitivity	4.8 (2.1)	5.8 (2.0)	6.0 (1.3)	6.2 (1.6)	5.3 (1.2)	5.0 (0.6)
Talent	5.2 (2.2)	6.8 (1.3)	5.8 (1.7)	6.5 (1.1)	4.8 (1.3)	5.0 (1.3)
Overall ability	5.3 (2.1)	6.8 (1.2)	6.0 (1.4)	7.0 (1.6)	5.3 (1.5)	4.7 (1.0)

Penmanship had a significant effect for the female authors, on both 'style' ( $<0.01$ ) and 'general quality' ( $<0.01$ ), in that for both the attractive and unattractive authors the essay when in poor handwriting received lower marks than when typed or in good handwriting. This effect of penmanship on the judgements of 'general quality' needs to be qualified in the sense that a significant ( $P < 0.05$ ) interaction was found between attractiveness and penmanship on judgements of 'general quality'. For the attractive female author the penmanship receiving the highest marks for 'general quality' was the good handwriting, whereas for the unattractive author it was the typed condition. A similar interaction was observed for judgements of 'ideas'.

Significant interactions were also noted for the female author in the judgements of 'intelligence' ( $P < 0.05$ ), 'talent' ( $P < 0.05$ ) and 'general quality' ( $P < 0.05$ ), but here whilst for the unattractive author the condition receiving the lowest marks is the poor handwriting, for the attractive author the lowest marks on these dimensions are for the typed essay.

#### DISCUSSION

It was found that, for assessments of 'intelligence', 'talent' and 'general quality', if the female author is unattractive then the typed essay received the highest marks, but if the female author is attractive then typing leads to the lowest marks being awarded. Why this should be so is not readily explained. For the female author poor handwriting had an adverse effect on the marks awarded for 'general quality' and 'style', this latter judgement being the one which intuitively would seem most likely to be affected by penmanship.

No significant main effects of the authors' physical attractiveness were found and this study does not therefore support Dion's (1972) contention that 'what is beautiful is good'. Landy & Sigall (1974) found an effect of authors' physical attractiveness on essay grades only for an essay poor in content and no effect was found for a good essay. It may well be that the essay used in this study was good in content. (The ratings of the essay condition receiving even the lowest grades were on average around 4.75 out of a maximum possible score of 9.)

No effects of attractiveness or penmanship were found when the assessors were led to believe that the author was male. It is possible that society expects females to have better handwriting than males and so when a female has poor handwriting the resulting impression created is poor. Similarly perhaps women are judged more on attractiveness than are men. However, this (especially the former) is just speculation.

It was not administratively possible to design the study with sex of rater in mind though we did manage for about half of the judges to be male. There is no evidence in the raw data to suggest that sex of rater was a relevant factor but further study may establish this. Similarly, it is not possible to compare statistically the ratings of the student judges with those of the teachers to see which group was most influenced by the experimental variables. Examination of the raw data on this point suggests that, if anything, it was the teachers who were most influenced by penmanship and attractiveness.

One might reasonably argue that essays are rarely marked by people who do not know the writers and who are nonetheless provided with a photo. This is true. Essay markers usually either know the writer or if they do not they are almost never provided with a photograph. However, this study illustrates how the attractiveness variable might operate in real-life situations (e.g. when one completes an application form and

supplies a photograph when applying for a job). Of course the influence of typescript and good or poor handwriting is likely to be present in a vast number of situations. In examinations do markers unwittingly give lower marks to essays written in poor handwriting? Or are they aware of this possibility and perhaps therefore try too hard to overcome this effect?

Similarly are the people who examine employment applications aware of the possible effects of the applicants' penmanship and physical attractiveness? If they are, then do they try to overcome these effects? Indeed, should they? Perhaps, as Clifford & Bull (1978) suggest, these stereotypic notions may sometimes have some validity.

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Received 10 October 1977; revised version received 13 March 1978

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