

Physical Attractiveness and Mental Illness

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The relation between physical attractiveness and mental disorder was investigated in two studies of women. In one study, hospitalized mental patients were found to be decidedly less physically attractive than normal controls, based either on live (face-to-face) ratings or on ratings of photographs of the subjects by judges who were unaware of the subjects' mental statuses. Early and current adjustments were reliably associated with appearance for both mental patients and nonpatients. A second study of mental patients replicated some of the first study's findings and further examined the consequences of appearance within a psychiatric hospital setting. As compared to the more attractive patients, homelier patients were less socially responsive in a standardized interview procedure, had more severe diagnoses, were hospitalized for longer periods, and received fewer visitors from the community. Physical attractiveness accounted for a large significant amount of length-of-hospitalization variation when degree of psychopathology and other possible moderator variables were controlled statistically.

Two questions concerned with the role of physical attractiveness in mental illness are posed by the studies reported in this article: (a) Are maladjusted people less physically attractive than normal individuals and (b) what are the consequences of physical attractiveness for hospitalized mental patients? These questions are raised primarily by the large number of investigations examining the social consequences of being good looking or not. Highly consistent results lead to the conclusion that in our society, beautiful people are greatly valued and well-treated while those who are unattractive receive a most regrettable reception. The less attractive an individual is, the less he is liked and the less he is preferred as a work, dating, and marriage partner; and he is expected to be less happy and to hold less desirable jobs in the future (Dion, Berscheid, & Walster, 1972; Stroebe, Insko, Thompson, & Layton, 1971). Unattractive people are also expected to do more

evil things, and their misdeeds are considered more serious than are the same things done by a better-looking wrongdoer (Dion, 1972; Miller, Gillen, & Schenker, 1974). If a misfortune befalls one, the less attractive he is, the less sympathy he receives (Shaw, 1972). Also, unattractive individuals have less influence on others than do better-looking persons, and people will not work as hard for the former as they will for the latter type of individual (Kahn, Hottes, & Davis, 1971; Sigall, Page, & Brown, 1971). Even the mere association with an unattractive person produces a negative social reaction (Sigall & Landy, 1973).

Evidently, the environment is quite a different place for physically attractive people than it is for those who are homely. The former have a nicer, more forgiving, supportive, and pliable social world; and it should be easier to adapt to it than to the conditions faced by the latter group. Hence, the long-term adjustment of unattractive people ought to be relatively poor, and more of them should be mentally ill than good-looking persons. It can be argued that an opposite relation could be found. For example, beautiful children are alleged to be frequently spoiled and therefore more poorly adjusted as

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adults than those whose looks are plainer. But some additional studies strongly suggest the unattractive among us are the ones whose mental health is adversely affected. Berscheid, Dion, Walster, and Walster (1971) and Kirkpatrick and Cotton (1961) report that it is the better-looking people who date more often, have more friends of both sexes, and are happier in their marriages.

Being friendless and unhappy can be considered aspects of long-term adjustment. However, no study appears to have been done that is explicitly concerned with the relation between mental illness and attractiveness. That is the major purpose of the first of the two studies reported here, namely, to see if persons who are mentally ill are less attractive than individuals whose adjustment is adequate.

Such a relation, if it exists, could have very important implications for understanding and treating mental illness. But a relation between attractiveness and mental illness conceivably might be due to unimportant and even trivial processes. Thus, it could be that confinement in a mental hospital does not allow people to groom themselves adequately or that disturbed people pay no attention to their appearance, and, hence, look unattractive. That is, it is the mental illness that causes bad looks rather than vice versa. The plausibility of this latter explanation would be decreased if it were found that for hospitalized patients, the less attractive ones were rated as the most severely mentally ill and if it were found that an attractiveness-adjustment relation existed prior to the onset of mental illness.

Nevertheless, whereas cues about causality can be found, unequivocal establishment of causal relation is not possible with a correlational study. And if maladjustment is likely to be the cause of an unattractive appearance, it could be argued that for humanitarian reasons we should not study the process. It may seem offensive to demonstrate that people who are emotionally unstable and who are also severely stigmatized by society are ugly as well. In fact, while doing this research, we were the target of some hostility from hospital

employees who saw the study as possibly degrading to their patients.

But if a relation between appearance and maladjustment is found, its significance may be anything but trivial, as has been indicated. Moreover, the results of the attractiveness studies that were reviewed raise another issue that should be examined. If mental patients are more unattractive than normals, no matter what causes them to look that way, prior research suggests they may be badly treated and ill regarded by others such as relatives and the hospital staff. This possibility cannot be lightly dismissed because the consequences may be quite important. Disagreeable experiences resulting from an unattractive appearance might hinder the recovery of mental patients. The second study was primarily designed to answer this last question, although each of the studies provides data pertinent to both questions.

Study 1

Method

The subjects of the two studies were females. Only females were used because we wanted to avoid sex as a variable, and some trends in the literature suggested that beauty was a more important factor for women than for men.

Subjects and procedure. Three samples of subjects were selected. The first consisted of hospitalized patients (hospital group) chosen from residents, aged 18 to 60 years, who were free of organic damage and not mentally deficient. Hospital diagnosis was not used as a criterion. This group consisted of 23 subjects whose average age and years of education were 32.8 and 10.8, respectively, and whose mean total time in the hospital (including all admissions) was 5.6 years. The remaining two samples consisted of a group of university employees and a group of shoppers. They will be fully described in the section where the procedures used with each are reported.

Subjects' attractiveness was measured in two ways. Two male raters made an independent judgment of each patient's beauty, using a five-point scale of attractiveness. The corrected interrater reliability coefficient was .93, which indicates that beauty can be objectively rated, as other researchers have reported. Unfortunately, the raters were necessarily aware that the subjects were mental hospital patients and for this reason might rate them differently from control subjects. Because of this potential problem, a photograph was taken, which was the basis for a second measure of attractiveness to be described subsequently. A Polaroid SX-70 camera was used to ob-

taken a colored photograph of each subject's face taken against a neutral background.

Each patient's adjustment was measured in three ways. Perception of her own adjustment (self adjustment) was assessed by asking her how satisfied she felt usually and how she got along with other patients, the staff, and a close relative or friend. For each of these four estimates, a five-point rating scale was used. These scores were then summed to give an overall index. Adjustment within the hospital (hospital adjustment) was obtained through an interview with an aide who was well acquainted with the subject. Using a five-point scale to make each judgment, the aide indicated how the patient got along with him, with the staff in general, and with other patients. Again the scores were summed to get a single index. Finally, a scale devised by Ullmann and Giovannoni (1964) was administered to measure interpersonal adjustment (early adjustment) prior to the onset of mental illness. The scale measures social and sexual adjustment from childhood to maturity.

The second question, which focuses on the consequences of physical attractiveness, dictated several measures. The duration in weeks of the present hospitalization (present hospitalization) and the total time for both present and past admissions confined to a hospital (total hospitalization) were obtained from each patient's hospital record. The final measure was to have each subject estimate the number of weeks that she expected to remain in the hospital (estimated discharge).

The second sample consisted of women, aged 18 to 60 years, who were employed either at a university library or faculty club (university group). There were 30 women in the group, and their mean age of 31.3 years is very similar to that of the hospital group. However, the average number of grades completed by the university group (14.8) was higher, as had been expected. The procedure used with these workers was as much as possible like that employed with the hospital group. However, they were informed they were serving as a control group for hospitalized psychiatric subjects, and they were also offered \$2 as an inducement to participate.

Each worker was seen individually at a convenient time during her regular working hours. Using the five-point scale described, her attractiveness was surreptitiously rated; and subsequently, a photograph of her face was also taken as had been done with the patients. Three measures of adjustment, analogous to those described for the hospital group, were obtained. A self adjustment score was gotten by asking each worker to rate how she got along with other workers, the supervisory staff, a close relative or friend, and how satisfied she felt most of the time. An early adjustment measure was obtained using the Ullmann-Giovannoni scale with items pertaining to hospitalization deleted. Finally, a work adjustment rating (work adjustment) was secured from the subject's immediate supervisor in the same way as the hospital adjustment rating was acquired from the aide. For this group, no attempt was made

to obtain data pertinent to the consequences of attractiveness.

A third sample of subjects was selected from women shopping at a discount store (shopper group). It was hoped this group would be more like the patients for education. A female assistant stationed herself near the entrance of the store at various times during the week and approached unaccompanied women who appeared to be between 18 and 60 years of age. The assistant introduced herself as a researcher from the nearby university. She stated she was surveying women's views about contemporary problems, and asked the shopper to be a subject in return for a \$2 payment. After the shopper agreed to participate (all but a few did so), a male researcher joined them and covertly rated the subject's attractiveness. Prior to this time, the male researcher and another male had independently rated 15 shoppers; their unadjusted ratings correlated .94. Following introductions, the subject was given \$2, a stamped self-addressed envelope, and a questionnaire that she was asked to complete by herself and then return by mail. The questionnaire contained items about issues such as the economy, but the critical items were those assessing adjustment. A self adjustment measure was obtained by means of four items, as in the other groups. For those who were employed, a work adjustment measure was obtained using two items, one measuring relationships with other workers and the other assessing relationships with her supervisor. The early adjustment items that were used with the university group were given under the heading "Social History Inventory." Again, no attempt was made to get data pertinent to the second question posed in this study, that is, the social consequences of attractiveness.

A total of 40 subjects agreed to complete and return the questionnaire, and 29 (72%) were actually returned. The average age and years of schooling completed were, respectively, 34.4 and 13.75. Hence, the sample is well matched to the other two for age, but education is higher than that of the patients. As it turned out, however, neither education nor age was found to be significantly related to attractiveness for any group.

The final part of Study 1 entailed rating the photographs of the university and hospital groups for degree of attractiveness. The raters were nine male and five female students enrolled in the first author's graduate psychopathology class. They were taken to the institution housing the hospital group because we wanted the patient photographs to remain in the hospital. There, each student was individually presented with the photographs of the hospital and university subjects after these had been shuffled together. The students sorted the photographs into six piles in terms of increasing attractiveness; they were not informed about the nature of the subjects or the purpose of the study until after the ratings were made. The adjusted interrater composite correlation was highly reliable ($r = .95$). The photo-live rating correlations were high and significant—.59 and .76 for the university and hospital

groups, respectively—but they are both lower than the internal reliability of either rating. Perhaps this means that several photographs can be taken of a given face that differ in degree of apparent attractiveness, and yet the raters can agree on how attractive the person seems to be in each photograph. On the other hand in a live rating, the judge is less misled by a flattering angle of the face or a disagreeable expression because he can see the face from all angles and various expressions can be noted. This possibility suggests that a live rating is more valid than one based on a photograph.

Results and Discussion

The attractiveness ratings results are shown in Table 1. Of particular interest are the photo ratings, since these are unlikely to be biased in view of the procedures used. According to those ratings, the patients are much less attractive than the university sample, $t(51) = 4.16, p < .001$. As may be seen, the hospital group is also judged relatively unattractive on the basis of the live ratings. The patients' scores are significantly lower than those of both the university group, $t(51) = 4.92, p < .001$, and the shopper group, $t(50) = 3.83, p < .001$, whereas the two control groups are not reliably different from each other. These data clearly show that the mentally ill subjects are relatively unattractive people.

However, the preceding findings do not necessarily indicate that unattractiveness produces mental illness nor even that throughout their lives, maladjusted people are less attractive than those enjoying better mental health. The control groups reside in the community while the hospital group is in a mental institution. Possibly, the psychiatric hospitalization is responsible for the difference in attractiveness between patients and controls. Likely, grooming is more difficult in the hospital than at home because there is little privacy in large state-operated facilities, and beauty aids may be less readily available. Perhaps more important is the impact on most women of entering such a place. The radical experience of being thrown among a lot of odd strangers and being unable to control their own fate may well lead them to disregard their looks and thus appear unattractive.

But data were collected that allow an examination of the attractiveness-adjustment

Table 1
Means and Standard Deviations of Attractiveness Ratings Received by the Three Groups of Study 1 Subjects

Type of rating	Group					
	Hospital		University		Shopper	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Photograph	2.5	.93	3.7	1.04	—	—
Live	2.3	.82	3.3	.65	3.2	.80

Note. Higher scores indicate greater beauty.

hypothesis while eliminating the possible role of the hospital. The attractiveness rating assigned to the psychiatric patients, all of whom were in the hospital, was correlated with the adjustment indices described. The results for the Study 1 subjects appear in Table 2, and all are in the expected direction. Whereas for the photo rating the correlations are not reliable (only the self adjustment r reaches $p < .10$), in the case of the live ratings, the self adjustment r is significant ($p < .05$) while the hospital adjustment r is nearly significant ($p < .10$). Thus, the better looking a patient is, the better she reports her adjustment to be, and there is a tendency for the aide to also describe her adjustment as better. Perhaps hospitalization does cause a patient to appear less attractive, but the coefficients in Table 2 indicate the attractiveness-adjustment association cannot be explained that simply.

While a psychiatric hospitalization per se cannot explain all of these findings, perhaps the only additional variable that needs to be considered is the *onset* of mental illness itself. It seems possible that as the morbid process develops, the sufferer becomes more careless about her appearance. Further, the more severe the disturbance, the greater the carelessness; and hence, the less attractive she appears to be.¹ And, contrary to the hypothesis being tested, the unattractive women might

¹ It should be noted that all raters were instructed to disregard grooming, dress, and hair styling and to base their judgments only on physical features. However, factors other than physical features may have influenced the ratings.

Table 2
Correlations Between Attractiveness and Adjustment Measures for the Hospital Group Subjects of Study 1 (n = 23)

Type of adjustment	Type of attractiveness score	
	Live	Photograph
Self adjustment	.47*	.39
Hospital adjustment	.37	.20

* $p < .05$.

have been as well adjusted as the attractive ones prior to morbidity. This possibility led to our using the early adjustment measure, which assessed the adequacy of adjustment during childhood and young adulthood and, for the psychiatric patients, before the onset of mental illness. Table 3 shows the results, which are in the expected direction for all three groups. For the shopper group and for the patients, the results are reliable and indicate that the unattractive people had relatively poor interpersonal relationships early in life and before they were judged to be mentally ill. That, of course, is consistent with the many studies reviewed that show that from childhood unattractive people have poorer relationships with others than attractive ones. So these results are inconsistent with the possibility that it is only mental illness that causes these patients to appear unattractive. They do show that from early in their lives, unattractive women have fewer and less intimate relationships with others, as our hypothesis requires.

Study 1 also provides some information on the question of the consequences of physical attractiveness for psychiatric patients. It seems likely that the closer and more intimate the patient's interpersonal relationship with their families and with others in the community, the more pressure will be exerted to have her return to them. And, studies show that good-looking people have more friends of both sexes than plainer persons. Also, the community is a much nicer place for attractive than unattractive individuals as previous research makes amply clear, and the former should make greater efforts to return to it

than the latter. Hence, we would expect that the less attractive a patient is, the longer she should be in a mental hospital.

The correlations of attractiveness to indices of institutional residence are shown in the first row of Table 4. The less attractive the patient, the longer she estimates she will remain in the hospital, the longer her present stay in the hospital has been, and the longer she has been in a mental hospital during her lifetime. The coefficients for the estimated discharge date and total time of hospitalization are significant and indicate that unattractive patients have longer periods of institutionalization. But attractiveness is also related to adjustment as was shown; therefore, we must consider whether it is mainly adjustment that is responsible for the longer hospitalization of the less good-looking patients. The contribution of adjustment to length of hospitalization is shown in the second and third rows of Table 4. It can be seen that with the single exception of hospital adjustment's correlation with present hospitalization, attractiveness correlates more strongly with length of hospitalization than do the adjustment scores. It is apparent that attractiveness does play a role in how long patients remain hospitalized, and this role is not explained away by the fact that attractiveness is also related to adjustment.

Study 2

The results of Study 1 are coherent and provide an affirmative answer to both the questions posed. However, most of the data are derived from a patient group that is too small ($n = 23$) to comfortably accept the provocative conclusions about mental illness

Table 3
Correlations Between Live Ratings of Attractiveness and Early Adjustment Scores for Study 1 Subjects

Subject group	r
Hospital	.49*
University	.22
Shopper	.66*

* $p < .05$.

that the results suggest. For this reason and also to examine more fully the social consequences of mental illness, a second study was done.

Method

Subjects. The subjects of the second study were 50 patients selected from 18- to 50-year-old residents of the same institution that provided the hospital group of Study 1. No Study 1 subject was used again. Those with organic brain damage were excluded, but hospital diagnosis was not otherwise considered for selection. The average age was 32.5 years, and they had completed a mean of 11.1 grades of schooling. Most subjects participated in the study 7 to 10 days after admission to the hospital.

Procedure. Two kinds of attractiveness ratings were made: One was on the subject's facial features only; the other was on overall attractiveness. In each case, neatness of dress and grooming was disregarded. Each of four judges independently rated each patient. They were a male graduate student, a middle-aged male psychologist, a middle-aged female laundry worker, and the patient's coordinator who was the mental health professional in charge of the case. The adjusted internal consistency among the four raters was $r = .79$ for the facial rating and $r = .90$ for the overall rating. Using the sum of the ratings assigned by the four judges as a single index of beauty, it was found that the correlation between the facial and overall ratings was $r = .88$. Because of the high correlation, only the overall rating, which has the better reliability, will be considered in this report. However, the results for the two ratings were virtually identical.

Although Study 2 was primarily concerned with the consequences of mental illness, some measures were taken that are pertinent to the attractiveness-adjustment issue. Self adjustment and early adjustment were measured as described in Study 1. The patient's diagnosis was used as a crude indicator of adjustment by assigning a score of 0 for schizophrenia and a 1 for all other categories. Finally, a behavioral measure of each patient's interpersonal

Table 4
Correlations of Measures of Hospitalization to Attractiveness and Adjustment for Study 1 Patients

Attractiveness and adjustment measures	Estimated discharge	Present hospitalization	Total hospitalization
Live attractiveness rating	-.44*	-.37	-.52*
Self adjustment	-.05	-.27	-.29
Hospital adjustment	-.28	-.41	-.37

* $p < .05$.

Table 5
Correlations Between Attractiveness and Adjustment Measures for Subjects of Study 2 ($n = 50$)

Adjustment measure	r
Self adjustment	.19
Diagnostic label	.42*
Interpersonal adjustment ^a	-.35*

^a Interpersonal adjustment was measured using the Minimal Social Behavior Scale (described in Farina, Arenberg, & Guskin, 1957).

* $p < .01$.

adjustment was taken using a standardized procedure for assessing adequacy of social behavior called the Minimal Social Behavior Scale (MSBS). The scale was administered in the guise of an interview. One point was given for each item missed, such as not sitting in a chair when asked to or failing to respond to a question. The MSBS is fully described elsewhere (Farina, Arenberg, & Guskin, 1957), and its validity has been demonstrated (e.g., Lentz, Paul, & Calhoun, 1971).

Several measures were taken that were intended to reveal the consequences of physical attractiveness. Visitation rate was measured by dividing the total number of times the patient was visited by the number of days spent in the hospital. The patient's coordinator rated how pleasant it was to be with the patient and the frequency of interaction between the subject and other patients and staff members. Also, volume of writing in the patient's record was measured by counting the lines written in the admission note and in the preliminary evaluation report. Those measures were suggested by the research reviewed, which shows that unattractive people have relatively few friends, that they have undesirable characteristics attributed to them, and that people will do less work for them than they will for attractive individuals. Finally, measures indicating length of hospitalization were taken as was done in Study 1. The number of previous admissions was recorded, and following discharge, total number of days spent in the hospital during the current hospitalization was counted.

Results and Discussion

The results from Study 2 that are pertinent to the attractiveness-adjustment hypothesis are shown in Table 5. Each of the three coefficients is in the expected direction, and two are statistically significant. These correlations show that the more unattractive the subject is, the more likely she is to receive a diagnosis indicative of severe maladjustment (schizophrenia) and the more inadequate is her con-

Table 6
Correlations of Measures of Hospitalization to Attractiveness and Adjustment for Study 2 Patients

Attractiveness and adjustment measures	Previous admissions	Total days in hospital
Attractiveness rating	-.23	-.53*
Self adjustment	-.05	-.17
Diagnosis	.21	-.38*
Interpersonal adjustment	-.10	.38*

* $p < .01$.

temporary interpersonal behavior. Both studies, then, reveal that less attractive women are more maladjusted than better-looking ones, and hospitalization itself cannot explain this association because the association is found within a group of subjects who are all hospitalized. However, as in Study 1, the possibility exists that the onset of mental illness caused this association. Therefore, the correlation between attractiveness and the early adjustment measure was computed. It was found to be .43 ($p < .01$), which shows that unattractive patients had relatively poor interpersonal relationships even during childhood and adolescence. The finding is in good agreement with Study 1 and provides further support for the hypothesis.

Findings concerning the consequences of attractiveness for patients were all found to be in the expected direction. The less attractive the patient, the less frequently she was visited, the less pleasant she was judged to be, the less she interacted with people about her, and the less was written in her record at admission and in the preliminary evaluation. But of the preceding relations, only visitation rate was found to be significant ($r = .46$, $p < .01$).

The correlations of attractiveness with indices of institutional residence are shown in the top row of Table 6. Consistent with Study 1, we found that relatively unattractive patients have had more previous admissions and have spent more days in the hospital during the current admission. The latter correlation is statistically significant. Rows 2, 3, and 4 of Table 6 show the correlations of each

adjustment measure with the indices of institutionalization. Here also, as in Study 1, we find that attractiveness is more strongly related to hospitalization than are the adjustment scores, and therefore, adjustment cannot fully explain the attractiveness-length-of-institutional-residence association. Unambiguous evidence of the important role played by appearance in total days spent in the hospital was found when we did a multiple regression analysis. Appearance accounted for a significantly large amount of unique variance in total days spent in the hospital (16%), $t(41) = 3.78$, $p < .001$, after the variance accounted for by all of the other measures, including demographic measures, was removed.²

General Conclusions

We conclude that the mentally ill are relatively unattractive people, and for both patients and controls, the less attractive individuals are the more poorly adjusted ones. These findings do not appear due to trivial events such as that the mental hospital environment makes self-beautification difficult. The findings may reflect a process that is important in understanding psychopathology. That is, they indicate one way that mental illness is caused. We are not saying an unattractive appearance is the only factor contributing to severe maladjustment. Aside from the evidence pointing to other variables, it is obvious there are attractive mentally ill people as well as unattractive but well-adjusted individuals. But if physical appearance plays the role we hypothesize, the mentally ill as a group should be less attractive than controls—and that is what we found. Should it become certain that attractiveness and adjustment are causally related as hypothesized, this would have important theoretical and practical implications. Maybe other personal characteristics like athletic ability play a role comparable to appearance, as some research has already shown (Koocher,

² In addition to the adjustment measures shown in Table 6, these measures included age, education, rate of interaction with other patients, pleasantness of patient, and lines written in the admission note and preliminary evaluation report.

1971). Also, this process might explain why hereditary factors are involved in mental illness, which some well-done studies have demonstrated (Heston & Denney, 1968). Quite conceivably, unattractive parents have children who are also unattractive, and both generations find their social world harsh and adjustment to it difficult or impossible.

As for the consequences of physical appearance, the conclusion prompted by these studies is that the attractiveness of psychiatric patients does influence the way they are treated in the hospital. Unattractive patients are visited less often, they remain hospitalized for longer periods, and they tend to be less involved with others and to be judged less pleasant. Thus, the social consequences of an unattractive appearance for patients (as for people in general) are negative. Of course, if patients are as a group less attractive than controls as our findings indicate, they may be the recipients of other negative reactions that were not examined in these studies. Whereas what happens to patients who are unattractive may be very much the same as what happens to unattractive people generally, patients at times may be especially vulnerable to rebuff and perhaps should be protected by the hospital. It is interesting that the results concerned with the consequences of appearance that were found to be statistically significant—visiting and length of hospitalization—may be more controlled by members of the community than the hospital. Perhaps this reflects credit on the hospital staff, which according to our measures treats all patients fairly comparably regardless of how unattractive they are.

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