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**THE PYGMALION EFFECT**

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*The Pygmalion effect refers to the formation and transmission of expectations and their influence on educational outcomes. The application of these principles to the treatment of addictions setting is the focus of this chapter.*

**Introduction**

The concept «Pygmalion effect» is used in educational circles to emphasize the importance of expectations and the phenomenon of self-fulfilling prophecy. The term derives from Greek mythology. Pygmalion, a sculptor and king of Cyprus, fell in love with an ivory statue he had formed with his own hands; the statue came to life in answer to his prayer to Aphrodite, the goddess of love. This theme was used by George Bernard Shaw in his play «Pygmalion» to describe how the heroine Eliza was able to overcome many difficulties because Professor Higgins' was certain of her future as «a real lady». Central to her success was Professor Higgins' belief that such a transformation was in fact possible. Eliza, in the play, remarks: «The difference between a girl who is selling flowers and a real lady has nothing to do with how she behaves, but how she is treated».

Behavioral scientists have long suggested that merely expecting an event to occur may sometimes lead to an increased likelihood that it will occur. *Expectations have been shown to affect not only one's own behavior, but also the behavior of others.* A prime example of a setting in which expectations may bring about the desired behavior is found in teacher expectations about student behavior.

**The Pygmalion Effect in the classroom**

In 1968, Robert Rosenthal and Lenore Jacobson [1] published *Pygmalion in the Classroom* which attributed student improvement to teacher expectancies about the students. The book was widely discussed and had considerable impact on debates in the field of education. It was reviewed in many journals and was given news coverage in newspapers and on television, especially in the United States. The book was taken into account when school policies were drawn up and it served as a stimulus to research. It seemed that finally an answer had been found to the perennial question of why some students do so well in school while others consistently fail.

Rosenthal and Jacobson argued that positive expectancies by teachers may improve their students' performance as well as their overall IQ. In their study, students were assigned to teachers who were told that some of the students had been identified in a new test as «bloomers» or «coming stars». In actuality, these students had been selected at random, and the test used was an ordinary intelligence test. By the end of the year, the IQ of these students had risen, and the teachers reported that the designated «stars» had in fact been higher achievers and had displayed more interest in their classwork. The authors attributed the students' improvement to the initial expectancy by the teachers of the students' ability. This expectancy was then transmitted to the students through a complex series of verbal and non-verbal cues.

The Rosenthal and Jacobson study has been criticized on statistical and design grounds (Elashoff and Snow [2] 1971), and it has been argued that the expectations of teachers can have little effect on IQ scores. Nonetheless, convincing data from many studies are now available supporting the notion that positive and negative expectancies do indeed affect student behavior, even if not IQ scores (see 3, 4 for overviews).

Research since the 1970s has concentrated on two main themes:

- How do teachers form their expectations?
  - How do teachers transmit their expectations to students?
- How are expectations formed?

It is reasonable to assume that teachers and therapists form expectations about their students or clients in the same way that people in general form impressions and expectancies about other people. Baker and Crist [5] describe the psychological principles underlying the formation of expectancies over a broad spectrum of human behavior. The difference between what occurs in classroom or treatment settings and everyday situations is not found in the way expectations are formed, but rather in their consequences.

The principles which Baker and Crist identified as significant in the formation of expectations in teacher-student relationships are the following:

1. People view others according to their own personalities. As do people in general, teachers form their views of students on the basis of their own values and needs. They may have a preference for quiet or for lively students, or feel special affection for disturbed children, or they may perceive students who most resemble themselves as the successful ones.

2. People form lasting impressions based on limited information. When teachers meet students for the first time, they base their impressions on appearance and demeanor. They may also have some knowledge about the students' prior behavior, accomplishments, IQ, or older siblings or parents. These impressions can influence the teacher-student interplay for a long time afterwards.

3. People form impressions in absolute terms. When teachers characterize their students, they readily attach labels such as «good» or «bad» or «quick» or «slow».

4. Information contradictory of one's current impressions may be revised so to resolve the ensuing contradictions and allow the retention of the «absolute» label. This process makes it possible for observers to deal with incompatible phenomena without being forced to abandon their first-impressions and expectations about a particular person. If a «gifted» student fails an exam, «s/he had a bad day». If a «poor» student does well, this is seen as a one-time happening, «a lucky break», but not as the beginning of a new phase. It is hard to alter people's first impressions even with the introduction of contradictory information.

Applying such principles to therapist-client relationships as well would appear to be reasonable.

Dusek and Joseph [6] surveyed 77 studies dealing with the formation of teacher-student expectancies.

They identified five areas which seemed related to the formation of teachers' expectations:

1. Student attractiveness.
2. Student conduct in the classroom.
3. Folder information about the student.
4. The racial origin of the student.
5. The social class of the student.

The research does not indicate how long-lasting the effect of these factors is. First impressions may be subject to future corrective feedback, even though this may be difficult to incorporate, as discussed above. If teachers form early expectations about their students, based on limited information, therapists may also be inclined to do the same in relation to their clients. It is possible for a therapist to revise his or her impression and expectation of the client at a point after their initial contact. The client's initial impression of the therapist, however, may influence his or her overall impression of treatment and his or her motivation to stay in treatment.

#### **How are expectations transmitted?**

Brophy and Good have studied the manner in which the Pygmalion effect is mediated in the classroom, in other words, the manner in which teacher expectations are transmitted to students. They hypothesize that teacher expectations indirectly affect student outcome by means of differential treatment of the students stemming from the teacher's perceptions of these students. Teacher expectations, in turn, condition student attitudes, expectations, and behaviors. The following dynamics are at work in the transmission of expectations in the classroom setting:

1. From the outset, teachers form differential expectations of student performance.
2. Consistent with these differential expectations, teachers behave differently towards different students.
3. The teachers' differential expectations affect the way in which an individual student is expected to perform in the classroom.
4. Students will respond to teacher conduct which expresses their expectations.
5. Teacher expectations, when internalized by the students, may function as self-fulfilling prophecies.

Research on such dynamics confirms that teachers consistently give more frequent feedback to high expectation students, while ignoring low expectation students. Students, who enjoy the high expectation role, are also more likely to receive encouragement and active support. High expectation students also receive less criticism and are more likely to be praised for their achievements [4].

Within this framework, the result of teacher expectations on student performance and achievement is obvious. At the same time, it is important to remain aware that the quantitative aspect of the interaction reflects only part of the truth. Rogers [7] points out that what is decisive for the transmission of expectations is not how much praise the teacher bestows, but rather how the student receives the praise. Precisely the same verbal message may be interpreted in different ways by different students. For instance, if a student is overwhelmingly praised for something that s/he considers rather elementary, the praise may be interpreted as falsehood or as a reflection of the teacher's in reality rather low opinion of him/her. (The spoken message may be «heard» as «It is fantastic that you of all people did well – you with your limited capacity!»)

Meyer [8] follows similar reasoning when he writes that total understanding of the differences in teacher behavior is possible only when consideration is taken to the actual connotation of «key behavior» such as praise and criticism. Scathing criticism may be a means of humiliating someone, and constructive criticism may help someone learn from his/her mistakes. Therefore, the most important aspect is not *that* criticism is given, but rather how it is given and with what intention. Research has focused on the various components in this model: in part on the student, in part on the teacher, and in part on capturing the interaction between the two.

#### **The student in focus**

It has been shown that students' susceptibility to teacher expectations varies with variables such as age and social group. It seems to be especially the case that younger students and students who are particularly dependent on their teachers are more easily influenced by their teachers' expectations than are students who may be more proficient in forming their own impressions. (Research cited in Persell 1977.)

This does not mean that a therapist ought to become overly concerned with a client's age. Instead «the spirit» of these findings ought to be incorporated. In other words, when studying the effects of expectations, we must look at the client's self-confidence, the firmness of his/her self-image, and the dependent relationship the client has to the therapist. Rogers [7] argues extensively and convincingly that the student's self-image is a decisive factor in his/her receptibility to teacher expectations. The student's perception of the teacher is also of relevance here:

The way in which a pupil values his teacher will play an important part in determining the way in which a pupil reacts to a whole range of teachers actions. We are dealing here with the notion of a 'significant other' (...) Put simply, those people who are perceived as being significant by a child are the ones who are likely to have an influence upon the way in which that child comes to perceive himself.

Or it could be said that the student's susceptibility depends on whether the teacher is a model for him/her, that is, someone the student would like to emulate. If the teacher/therapist does play that role, the student/client will be more susceptible and «be open to» more of what the teacher/therapist says and does.

Furthermore, it has been shown that students who are perceptive and sensitive to tones of voice and other subtle elements of communication are often influenced by a teacher's expectations to a greater degree than are less sensitive students [9]. This could serve as a caution to the teacher/therapist to avoid using idle words and to try exhibiting a genuine interest in the student/ therapist.

### **The teacher in focus**

After performing further studies using their own model, Brophy and Good reported that the teacher's role varies in the degree to which their own behavior is influenced by expectations. They concluded that the propensity for «expectation influence» is different for individual teachers and distinguished three types of teachers:

1. The teacher who makes his/her own analyzes of students' traits and needs and who has firmly set notions about the goals and content of education. If the teacher has sufficient experience to set realistic goals and is proficient enough to overcome frustrations and obstacles, she will systematically help the students fulfill those expectations which are related to the goals.

2. The opposite of that teacher is one who develops rigid and stereotypical images of students, based on their earlier marks or grades, labels applied by other teachers, or first impressions formed at the beginning of the school year. This approach is likely to lead to negative expectation effects for low-achieving students.

3. However, most teachers probably belong to an intermediate group. Here, the expectations are rather flexible. The teachers change them according to new impressions as they acquire them. As a result, these teachers primarily serve to maintain existing differences between high- and low-achievers.

Brophy cites research that supports these notions about teacher differences. It must be admitted though that this support is more inferential than direct. Mitman [10] reports a study based on Brophy and Good's [11] research. Twelve elementary school teachers and their students participated. In brief, the results indicated that teachers differ in their propensity to be governed or restrained by expectations, but also that further research will be necessary to discern exactly how these differences become manifest in «teaching style» and what the effects are for high and low achieving students.

Nevertheless, an important observation which can undoubtedly also be applied to the treatment setting ought to be discussed. The gap between the ideal and reality in schools cannot solely be blamed on teachers, which is often done. Of at least equal importance are organizational factors such as curriculum, timetables, classroom size, the physical premises, and so on. These form the backdrop to the teachers' working conditions and establish the parameters of what is possible to achieve. This has been shown by Lundgren [12] and others. Brophy [4] has also looked at some organizational factors such as group size. Teachers who lecture large classes must maintain a rather fast pace, or soon find themselves defeated by lack of attentiveness and the like. Under such circumstances, it is harder for a teacher to wait patiently for an answer or to take the time to help a confused student than would be the case in a small group or in an individual tutoring session. Consequently, data collected in large classes seem to indicate that teachers favor «good students», whereas data collected from small groups reveal only small differences and even find teachers who try to work intensively with students who have difficulty keeping up. Parallels are easy to find with therapeutic work, such as in the number of clients per therapist. The time of year is another important factor. Early on, the teacher can «afford» to spend extra time with the slower students so as to weld the group or class together. But pressure to complete the curriculum eventually leads to a faster teaching pace. Some teachers then choose to concentrate solely on the «academically gifted».

In summary, different types of teachers probably do exist, but it is also the case that the regular flexible teacher probably adopts an approach to the students which has more nuances when operating within an advantageous organizational structure and a more stereotypical approach when working under unfavorable organizational circumstances.

### **The interaction in focus**

Brattesani [13] and others have shown that students learn about their own capabilities by noting how teachers treat the «good» and the «poor» students. Students then revise their own expectations and behave in a manner compatible with teacher expectations. This finding supports the model developed by Brophy and Good.

Researchers have also tried to identify the effects of students' expectations on teachers and the cumulative effects of teacher and student expectations. Feldman and Prohaska [14] showed that students with different expectations of a teacher's competence may communicate these expectations and thus have an impact on the teacher. (A therapist would here consider the significance of the drug treatment sector's reputation and image. A client who distrusts the treatment/ treater communicates this and a vicious cycle may ensue. But the start is good if the client believes that the treater can be of help.)

Feldman worked on and with another co-worker conducted an experiment on the simultaneous interplay between teacher and student expectations [14]. The study subjects were women psychology students at an American university. Those who were assigned a teaching role were told that a particular student they were going to teach either was likely to do quite well or that the student was going to perform poorly. Irrespective of this information, the student was told either that the teacher was good or that she was bad. The students were led to believe that the experiment was one stage of a joint project between the psychology and education departments at the university for the purpose of training teaching assistants. Furthermore, they were told that their own role was to help evaluate both the teacher and the lecture itself. Some of the students were then told that the teacher they were to have was excellent and was merely trying to polish her already exceptional talents. Another group of students were told that their teacher was seriously limited and was trying to salvage her future as a teacher.

The lectures were then given, with both groups of study subjects, the teachers and the students, completely unaware of the instructions given to the other group. Attitudes towards the lectures were measured as was knowledge retention from the lecture. Teaching skills were assessed. The findings showed that the teachers' positive and negative expectations were communicated to the students and affected their performances – regardless of whether the particular student had positive or negative expectations about the teacher. It was also shown that the students' views of the lectures were influenced by their expectations of the teacher. In other words, it was possible for a student to react negatively to the teacher and the lecture and still do well because of the teacher's positive expectations. And, the other way around, a student could be positive towards the teacher and lecture and still do poorly because of the teacher's negative expectations.

In contrast, students expectations had no effect on the teachers at all, either as regards the lecture or skills. This finding is in direct contradiction to what could theoretically be assumed, namely, that the teacher and student have a reciprocal impact on each other. It also contradicts Feldman and Prohaska's results in the study mentioned above. One explanation for this could be that the teachers in the experiment situation were so preoccupied with their lecturing that they were remained oblivious to student expectations. An alternative explanation would be that the students «restrained» themselves so as not to «disturb» the teachers. They had been told that their role was to make an objective assessment of the teacher.

This experiment illustrates some of the difficulties in identifying interactional effects in teacher-student expectations. It is quite likely that people behave differently in an experiment setting than they would under normal circumstances. Experiments have often been conducted using university students who are instructed to act as teacher or student and the lectures have been rather stilted. One reason for this study design has been to create as standardizable situations as possible, to enable other researchers to replicate the experiments. What is gained in precision though is lost in naturalness.

If a researcher decides to take the bulls by the horn and study teachers and students in «real life» classroom situations, the research problems become immense. The process to be studied is perhaps easy to discuss and speculate about, but its' substance is quite complicated. We discover a complex flow of interpersonal reactions, where each reaction influences the parties' behavior in the subsequent encounter, thus making the overall process extremely difficult to outline in detail.

A nearly classic research problem is involved here, namely, the formulation of general laws or principles that can be applied to all individual cases. This is particularly true of the behavioral sciences. Physics produced the law of gravity which could be applied to all bodies in fall. But how do we capture the universe of all human contacts in a single «law of interaction»?

However, the difficulties in attaining unambiguous research findings ought not be allowed to impede a discussion on what steers the contact between therapist and client and how it develops. In a study of several social welfare offices [15], the interplay between social workers and their clients was documented. What emerged was that the two parties used different criteria to judge the interaction. In the case of drug-abusing clients, the social workers believed that difficulties in the relationship were primarily due to the clients' deficient insight and motivation. Pettersson claims though that «This is apparently more of a problem for the social workers than for the clients. From the clients' perspective, the cooperation is more a question of how they are treated and understood» [15, p. 53]

This is an indication of the dynamics in the social worker-client relationship. Insufficient client insight and motivation may evoke certain reactions from the social workers that the clients then interpret as a lack of understanding. Or perhaps it is the other way around? Perhaps an insensitive and bureaucratic social worker («just collects information») provokes the client into acting in a way that is interpreted as inadequate motivation? If so, it seems to be especially in work with drug abusers that this vicious cycle needs to be broken [15, p. 152].

The role of expectation on treatment outcomes will be the focus of the next section.

### **The Pygmalion Effect in treatment**

Parallels are easy to draw between education and treatment as to the importance of expectancies. Workers in the treatment sphere are intricately and intimately involved in labeling the conduct of clients under their care. The client is «motivated» or «unmotivated». He «is right for the program» or «isn't suited for the program». The «law of the Pygmalion effect» predicts that this labeling and classification will result in self-fulfilling prophecy.

Leake and King [16] conducted a study where counselors were led to believe that certain of their clients (disadvantaged alcoholics from skid-row) could be expected to display remarkable recovery during the course of counseling. The clients had been randomly chosen, but the counselors were told that a test had identified certain clients as having «high alcohol recovery potential». For ethical reasons, it was impossible to study whether reduced expectations would lead to client recovery failure. The control group consisted of those clients who were not designated as having a recovery potential. There were in fact no differences between the two groups in age, habits, or socioeconomic background.

The results brought some tangible consequences of favorable expectations to light. The test clients, for example, were more successful in finding and maintaining jobs, and they viewed themselves as experiencing fewer setbacks and having greater endurance than the control clients. Leake and King comment: «These results strongly suggest that disadvantaged clients from whom counselors expected recovery progress actually showed such progress. Clients who were in the control group did not show similar progress and had higher termination rates. Thus they may have experienced a real disadvantage in not being identified as having «High Alcohol Recovery Potential» [16]

It appears that if disadvantaged alcoholics are to become quickly integrated and adjusted into the mainstream society, higher and more favorable expectations must be planned for them. Disadvantaged persons cannot be assessed against social health standards that they are not expected to fulfill. Haphazard, informal, and perfunctory plans and expectations for their ascribed status are products of the past which should not be allowed to sweep counseling programs into the future [16, p. 20].

One means of accomplishing this goal – that is, creating adequate and realistic treatment plans (and not only for skid-row alcoholics) – is to enhance our understanding of how diagnoses are made.

In an extensive review of the literature in the field of treatment, Rossi and Filstead [17] looked at the issue of diagnostics. In short, they conclude that diagnoses in many cases say more about the diagnostician than about the diagnosed person. This might appear to be an extreme viewpoint. However, the diagnostic process never occurs in a vacuum, but rather always within an organization or treatment system and surrounded by a given system of values. Different therapists may look at the same client from different perspectives and therefore tend to stress different aspects of the client's situation. This means that clients will learn different things about themselves and their problems depending on which therapist they have. A therapist's assessment or diagnosis is communicated to the client and influences him/her and their subsequent interplay. It is easy to envision a process at work which is analogous to the one described by Brophy and Good [11] for the teacher-student interplay (see above), or as Rossi and Filstead states: «... the therapist selectively perceives information about the patient and then acts toward the patient on the basis of this information – communicating his impressions to the patient in the process. The patient in turn makes inferences about the therapist and the therapist's view of him. Possessing less than complete knowledge about treatment and his role as patient, the patient tends to confirm the therapist's initial inference and thus the self-fulfilling prophecy has run full circle» [17, p. 201].

Thus, different perspectives and different expectations may lead to different diagnoses. What is more, different diagnoses can lead to different types of expectations. This is not an attack on the diagnostic process in and of itself, but rather is a call for greater prudence in the use of words and greater vigilance as to the consequences of diagnoses.

Furthermore, research indicates that therapist behavior and the institutional treatment climate have a direct bearing on drop-out rates as well as on the client's treatment motivation. Rossi and Filstead found that therapists frequently identified client motivation or client «will power» as the agent of change, and that consequently they often blamed treatment failure on «inadequate motivation». Such an approach deals with motivation as a static phenomenon, as though clients and their behavior existed in a vacuum. It presupposes motivation as a precondition for acceptance into a particular treatment program, on the assumption that «high motivation» is related to successful outcome in treatment. But, when this factor has been examined in follow-up studies, it is shown that motivation prior to treatment has no relevance for treatment outcome, irrespective of the criteria used to define recovery.

Such findings raise the question of whether motivation plays any role at all. Well, it does. But not in the way generally assumed.

Jenner [18] found little correlation between a client's decision to remain in treatment and any previous commitment the client may have had to confronting his or her alcohol problem. It seems that treatment factors are of much more significance. A good treatment climate (cooperation, shared responsibility, harmony between the staff and the clients) can cultivate the will to change in individuals who showed little inclination to change at the start of treatment. On the other hand, when the treatment atmosphere is poor (high levels of tension, low participation, existence of cliques), not even the most motivated clients are able to benefit from treatment.

Another cue to the importance of therapist behavior is found in studies on clients who drop out of treatment. With startling consistency, such studies reveal that client characteristics are of minimal significance for distinguishing between those who leave treatment and those who remain in treatment. Those who drop out of treatment consistently relate their decision to the staff with whom they have been in contact [19]. Fridell [20] shows that steps undertaken to improve the treatment milieu result in lower turnover rates among the staff as well as lower drop-out rates among the clients.

### Conclusions

In order to keep the drop-out rate low and to strengthen client treatment motivation, therapist motivation must be high. Positive expectations require a good treatment climate, which, in turn, is only able to flourish in a milieu where the staff is neither stressed or burned out. Good treatment outcome requires a good working environment for the staff.

A thorough knowledge of the function of expectancies may assist the staff in achieving treatment results. Therapists' attitudes and relationships with clients are crucial here. Researchers and clinicians agree about this. There is no such thing as a neutral personal encounter, and, consequently, therapists must recognize that they are capable of harming their clients despite good intentions [17]. Understanding the importance of the role of expectations can be a useful tool for therapists in their treatment endeavors.

The attitudes and expectations which the therapist has about a client may be the most decisive factor in treatment outcome. The Pygmalion effect is highly significant in the treatment setting.

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