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Source: *The American Statistician*, Vol. 32, No. 2 (May, 1978), pp. 58-60
Published by: Taylor & Francis, Ltd. on behalf of the American Statistical Association
Stable URL: http://www.jstor.org/stable/2683616
Accessed: 26-03-2015 19:37 UTC

Six-State Transactional Analysis in Statistical Consultation

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Transactional analysis can be used to analyze personal interactions between consulting statisticians and their clients. The Parent-Adult-Child model has recently been refined to consist of six states by subdividing the Parent and Child ego states. The authors briefly define the six ego states (Nurturing Parent, Critical Parent, Adult, Adapted Child, Free Child, and Rebellious Child) and describe their occurrence during statistical consultations. Recommendations are given for identifying the ego states, setting realistic goals for relationships, and modifying unsatisfactory transactions.

KEY WORDS: Transactional analysis; Statistical consultation; Ego states.

Introduction

Several statisticians have written about their personal views of interpersonal problems in statistical consultation. An early note by Phidler (1949) described, in a humorous style, some consulting power struggles. Deming (1972) proposed that the statistician offer a formal framework to the client to clearly delineate responsibilities. Hyams (1970) listed some frustrating client behaviors as well as some ineffective statistician behaviors. Bross (1974) dichotomized the statistician-client relationship according to which person has primary authority. Boen (1972) suggested the use of the Parent-Adult-Child (PAC) model, developed by psychiatrist Eric Berne to explain certain statistician-client conflicts. The general area of psychology that contains the PAC model is called transactional analysis, commonly called TA. Some transactional analysts have recently divided the Parent ego state into two substates, Critical Parent and Nurturing Parent; they have similarly divided the Child ego state into three substates, Adapted Child, Free Child, and Rebellious Child, but they have not further subdivided the Adult state. The Free-Child state occurs so seldom in consultation and is so unlikely to pose a problem, we shall define it for completeness but not discuss it further. This article asserts that refinements (Goldhaber and Goldhaber 1976) of the Parent and Child ego states are very useful in explaining more deeply the Parent and Child interactions between statisticians and their clients. Although research on methods for manipulating the ego states of others is still in its infancy (Goldhaber and Goldhaber 1976), the authors have found "common sense" use of the six-state model to yield satisfying results. The use of TA has been proposed for consultation in operations research (Martin and Pendse 1977).

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Transactional analysts have not yet agreed upon formal definitions of the six ego states, but there does not seem to be any argument about the ego-state concept. The following brief definitions will be used in this article. The names of the ego states are intended to be accurate lay-language descriptions of behavior.

Critical Parent (CP). A person in this ego state enforces rules, criticizes, punishes, and scolds.

Nurturing Parent (NP). A person in this ego state comforts and helps people he sees as needy and vulnerable.

Adult. A person in this ego state is rational and objective.

Adapted Child (AC). A person in this state pleases, placates, conforms, and obeys authority.

Free Child. A person in this ego state freely expresses delight or disappointment. (This state is important in many uses of TA but occurs very infrequently in statistical consultation and is not a problem when it does occur.)

Rebellious Child (RC). A person in this ego state feels hurt and anger and seeks retribution.

Consultant-as-Parent

Many clients who come to statisticians act as though they are in a Child ego state and see the statistician as a Parent. After some interaction, however, the statistician can get a fairly clear picture as to whether the client is AC or RC. Some clients seem very deferent, apologizing for not being able to solve the problem themselves even though they took a statistics course years ago, acting helpless, and generally wanting to be rescued. Such clients are in the AC state and want the consultant to be in the NP state. If the consultant is in NP, doing his best to help and not intimidate or scold, they seem to cooperate to the best of their ability. If the consultant is in a grouchy mood and shows irritation at any of their thought processes (i.e., behaves like CP), however, they seem easily hurt and start to withdraw. After the slightest "scolding," many AC clients either don't come back for further assistance or become very tight-lipped about the part of their work which they assume the statistician disapproves. It is very natural to have their open cooperation with the statistician *conditional* on his not being a CP. Put in TA language, they are prepared to be in AC as long as the statistician stays in NP, but his slipping into CP invites them into RC. The RC behavior does not have to be as conspicuous as a temper tantrum; an excellent way for an RC client to get back at a CP statistician is to withhold key information about the study.

Some clients arrive apparently already in an RC state. They generally come in looking and sounding irritated because some third party, such as a journal editor or regulatory agency, told them their work is statistically inadequate. They commonly say that statistics is a game they are forced to play. Their attitude is cynical, and they are looking for a statistician to act as their lawyer and bail them out. They may want a clerk (AC) or rescuer (NP). The statistician might not sympathize with their case and, as a result, respond in the CP ego state. Responding to RC clients with scolding, however, drives them away or at least diminishes their desire to talk about the weak points of their studies. Such clients are looking for a lawyer to help them win their cases, not a prosecuting attorney to shame them. If the statistician projects complete loyalty to the client, seeing him as a nice, helpless creature to be rescued (projecting NP), the client is likely to open up. This situation poses an ethical dilemma, however: to gain the cooperation of the client who is afraid of punishment (rejection of article or censure by regulatory agency), the statistician has to implicitly promise not to expose study weaknesses to the editor or the regulatory agency. The embarrassed client wants full confidentiality and hopes the statistician will tell no one about the study's weaknesses.

Many clients have a powerful preconceived image of statisticians as Parents. They fear being belittled to their faces or gossiped about for not being good at logical reasoning. It is true that some clients will cooperate fully with a CP if he seems fair, but most clients in a Child state will cooperate (AC) much better with an NP statistician.

Consultant-as-Child

Just as some clients have a strong preconceived image of statisticians as Parents, there are other clients who think of statisticians as Children. Most of these clients seem to be ignorant of what statistics is and what statisticians like to do, but proud statisticians easily become incensed at being asked to play a clerk role. In TA language, a request that the statistician play an AC role invites him into RC behavior. Bross (1974) articulated the feeling of insult a high-level statistician can experience when asked to be a clerk. When invited into an RC ego state, the statistician has several sophisticated weapons at his disposal such as saying he is too busy to work with them, recommending a text he knows they can't understand, or telling them to take a statistics course and solve their own problems. One of the client behaviors that often invites statisticians into the RC state is sending a messenger with data from a poorly designed study, along with the order to have it analyzed by next Tuesday. The messenger cannot answer any questions, negotiate deadlines, or make any scientific decisions. An even greater insult is the order to per-

form a specific calculation that the statistician thinks is totally inappropriate. It is usually effective to ask to meet with the decision-making project director to discuss options, because most investigators who send messengers as described do so out of ignorance rather than one-upmanship. That is, it is usually effective for the statistician to restrain acting out his RC urges until the investigator is aware of the consultant's desires in the relationship. The statistician who is vocationally insecure sometimes has to swallow his pride and act out his RC state only by complaining to other statisticians about the stupidity of his troublesome clients. The natural AC role for statisticians is that of the clerk, which is not really a consulting role. Some statistical clerks have enough statistical knowledge to consult, but dislike the responsibility of consulting decisions.

Consultant-as-Adult

Many clients seem to expect statisticians to be Adult. These clients present the Adult side of themselves, asking their questions in a manner that suggests they want only straight, factual answers. Whether they actually feel dispassionate about the statistician's answers is something else. Some straight answers, such as telling them that their proposed sample size is too small or the design they used is very inefficient, must be unpleasant to hear. However, telling a client that the design he thought of on his own is as efficient as possible must be satisfying to hear. Nevertheless, many clients show little or no emotional reaction to our comments and generally believe in a logical get-at-the-facts manner. Even when comments could naturally be taken by them as criticism of their work, they do not appear to be hurt or angry or stop cooperating in any way. These clients act as Adult as possible and seem to appreciate the consultant doing so also.

Statistical consultation is a professional interaction most appropriate for an Adult-to-Adult relationship. Any statistician who is aware of our public image knows that many people see us as the ultimate in cool objectivity. Many students are surprised to learn of any consulting relationship other than Adult-to-Adult and hesitate to believe their own consultations could be anything else. The authors know of no statistics text that suggests any other kind of consulting relationship, or even discusses relationships at all, so it is understandable that students assume no difficulties. The discipline of statistics holds objectivity in the highest regard, and the majority of statisticians prefer the Adult-to-Adult consultation relationship.

Recommendations

The following recommendations are given to the statistician who wants to use knowledge of the ego states in consultation.

1. Practice identification of ego states in settings *other* than consultation (e.g., watch television in order to increase awareness of visual and oral communication of ego states.)
2. Solicit feedback from perceptive friends about the ego states one projects, with specifics as to how they are conveyed. Details about gestures, body language, facial expression, and tone of voice are invaluable.
3. Study videotapes of yourself in statistical consultation, without the sound, with only the sound, and with both sound and picture. Check for consistency of verbal and non-verbal messages. See if clients are visually observed with adequate frequency. Determine whether the state that is being conveyed is the intended one. (The authors have found that videotaping has a negligible effect on consultations after the first few minutes.)
4. In order to invite clients not in the Adult ego state to enter the Adult state, practice conveying Adult, even when tempted to fall into another state. This is not easy; results should be checked with friends and/or videotapes. Similarly, practice conveying NP for those clients who cannot achieve Adult and seem to be able to interact only in one of the Child states with a statistician. The goal here is to invite them to leave RC and enter AC.
5. Read Goldhaber and Goldhaber (1976) and consult their bibliography if interested in more details of ego states or other uses of transactional analysis.

[*Received February 5, 1977. Revised January 10, 1978.*]

References

Berne, Eric (1964), *Games People Play*, New York: Grove Press.
Boen, James R. (1972), "The Teaching of Personal Interaction in Statistical Consulting," *The American Statistician*, 26, 30–31.
Bross, I.D.J. (1974), "The Role of the Statistician: Scientist or Shoe Clerk," *The American Statistician*, 28, 126–127.
Deming, W. Edwards, (1972), "Code of Professional Conduct: A Personal View," *International Statistical Review*, 40, 215–219.
Goldhaber, G.M., and Goldhaber, M.B. (1976), *Transactional Analysis: Principles and Applications*, Boston: Allyn and Bacon.
Harris, T.A. (1973), *I'm OK, You're OK*, New York: Avon.
Hyams, L. (1970), "The Practical Psychology of Biostatistical Consultation," *Biometrics*, 27, 201–212.
Martin, Michael J.C., and Pendse, Shripad G. (1977), "Transactional Analysis: Another Way of Approaching OR/MS Implementation," *Interfaces*, 7, 91–98.
Phidler (1949), "News and Notes," *Biometrics*, 5, 256–257.

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