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ABSTRACT

The use of reciprocal behavior contracts with families of behavior-problem adolescents was investigated. Most family contracting to date has involved one-way contracts; that is, the child agrees to certain responsibilities for which he will be reinforced by the parents. A reciprocal contract requires the parents, in addition to the child, to agree to certain responsibilities (or behaviors) in exchange for which the child offers reinforcers to the parents. This novel form of contracting has arisen from serious consideration of the interaction process as analyzed by Thibaut and Kelly (1959) and Patterson (Neuringer & Michael, 1971). The theoretical frame of Thibaut and Kelly suggests that dyadic interactions are reciprocal and that the rewards of the interactions are based upon the responses of both persons not just one. Patterson's theory also stresses this reciprocity; in addition, his clinical work notes that to maintain parent behavior of reinforcing children for positive behavior, the parent in turn needs reinforcement from the children. In addition to presenting this theoretical framework for a new orientation to contracting with families of adolescents, the paper presents three pilot case studies. Problems with this procedure and suggestions for implementation are discussed. (Author)

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**Reciprocal Contracting with Families  
of Adolescents**

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**Paper presented at AABT**

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In recent years, behavior modifiers have turned their attention from the "artificial" settings of clinics and hospitals to the "natural" environments of classrooms and homes. There has been a concurrent change in the role of the behaviorist from therapist to trainer of "mediators." That is, many behavior modifiers no longer work primarily in office settings with a client; rather, they train mediators -- teachers, parents, peers, siblings -- to alter contingencies within the natural environment which will in turn change the behavior of the client (Patterson, McNeal, Hawkins & Phelps, 1967) or they train clients in procedures which the clients may use to control their own environments and behavior (Goldiamond, 1965; Patterson, 1971). There are several important reasons for this shift. One reason, as noted by Tramontana (1971), is that changes produced in the artificial environment will generalize to some extent to the natural environment, but most likely will not be maintained in the "unmodified" natural environment, since the original contingencies would again produce the old behavior patterns.

Behavioral contracting is one method of working with both clients and the social agents within the "natural" environment. A behavioral contract is a written statement of contingencies signed by all involved parties or as Lundell (1972) defined it: "an agreement between two parties which specifies (1) a requirement to be met, and (2) the consequences for the fulfillment of that requirement." Behavioral contracts are based on a simple reinforcement principle: that if a high probability behavior (reinforcer) is made contingent upon a low probability behavior (desired behavior), then the low probability behavior will increase (Premack, 1965). In addition, some contracts use punishment by applying negative sanctions -- i.e., a behavior should

decrease by the removal of positive consequences, usually loss of privileges or response cost. The contracting process also involves modeling and self-control procedures which will be discussed later.

Behavioral contracts have mainly been utilized in three areas: in the classroom, between teachers and students; in therapy between therapist and clients; and finally, with families, between spouses or between parents and children. This paper is concerned with the third major area -- contracting with families.

In the area of family contracting, contracts have been negotiated between parents and a problem child, between spouses, and between all family members. Contracting with spouses often involves exchanging of behaviors (Rappaport & Harrell, 1971); the exchanged behaviors must be equivalent so that if one partner must decrease an undesirable behavior, the other partner must do likewise. This reciprocal exchange provides a couple with a method of dealing with present and future problems without being dependent on a counselor.

Contracting with parents and a child has usually involved adolescents. Thorne, Tharp and Watzel (1967), working with referrals from juvenile court, described several cases of "implicit" contracts and one case of an "explicit" (written) contract. The written contract was negotiated between a 16-year-old boy, his mother and step-father. After several weeks, the boy was behaving so well the parents decided the contract was no longer essential and immediately withdrew it; the youth was truant for the next seven consecutive days, was arrested eleven days later for burglary and placed in detention. This unfortunate event vividly demonstrates the need for cooperation from the parents and for using a fading procedure to withdraw from a highly-structured contract.

Tharp and Wetzel (1969) stressed the role of the therapist as a model in the contracting process with families -- modeling negotiating skills for the family, prompting the family through their first negotiations, and then fading involvement. Stuart (1971) described a contracting process for families of delinquent children. His contracts contained clauses for responsibilities, privileges, sanctions, and bonuses plus a feedback system consisting of a method of monitoring. Stuart and Lott (1972) attempted to evaluate these contracts with 79 families of delinquent or pre-delinquent adolescents. The authors found that contracts were successful when compared to no treatment. While no specific parameters of the contracts or therapists were related to treatment outcome, the authors suggested that the negotiation process itself may be the important variable. The therapist's skill as a negotiator and his ability to ensure "face-saving" on the part of all involved may be a crucial factor.

In some families with adolescents, parent-child relations have degenerated into punitive interactions: parents are unable to hold productive discussions with their children and the children in turn perceive parent dialogue as aversive and react thus (Tharp & Wetzel, 1969). Given this situation, the child would probably resent being labeled as the problem and placed on a contract since he perceives the parent as the problem. For this very reason, Fish and Heltrich (1973) advocate conjoint family contracts wherein all family members exchange behaviors.

Exchange contracts have been used in marriage counseling but rarely with parents and children (except for Fish & Heltrich, 1973). Some findings by Reid (1967) and Patterson and Reid (1970) and the implication from social interaction theory (Thibaut & Kelley, 1959) would suggest a greater use of

reciprocity in contracting. Thibaut and Kelley (1959) base their social interaction theory on an economics model involving exchanges of "goods"; that is, persons provide each other mutual support for activities they are involved in. Many types of reinforcers act as the "goods" to be exchanged; the effectiveness of the reinforcement is dependent upon its availability and its cost (factors tending to inhibit or deter the execution of a behavioral sequence). Reciprocity occurs when there is a balance of trade. These theorists suggest that dyadic interactions are reciprocal, therefore the reinforcement is based on an exchange of reinforcers not just one person providing a reinforcement for another. According to this theory, contracts which have the child perform a task (responsibility) and the parent provide a reinforcer might be reinforcing for the child since he is exchanging a behavior for a reinforcer; but the parent is not actually exchanging and therefore, the interaction is not truly reciprocal. Patterson and Reid (1970) found in a clinical case that the improved behavior of a behavior-problem child was indeed not enough to maintain the mother's behavior of applying contingent reinforcement. The other children in the family had to be taught to give their mother social reinforcement. In addition, Reid (1967) found that within families, a person offers the most positive reinforcement to the person from whom he receives the most and a similar relation holds for aversive consequences. So a child who is offering little positive reinforcement to his parents and presenting much aversive stimulation to them, must also be receiving little reinforcement and much aversive consequences. Therefore, Fish and Heltrich (1973) may be right when they contend that the whole family is the problem, not just one particular child.

The theoretical stance of Thibaut and Kelley (1959) and the findings of

Patterson and Reid (1970) suggest that a one-way contract would not be reinforcing for the parents and therefore not lead to a productive dyadic interaction with a balance of trade. Reid's (1967) findings imply that the parents also are exhibiting inappropriate behaviors which should be changed. Since the parents and the child both need to change behaviors, since both need to provide reinforcement to have a balance of trade and since both may perceive the other as the problem, the use of reciprocity in contracting would seem fruitful.

#### Reciprocal Contracting Procedure

Given the above implications for a greater utilization of reciprocity in contracting, the following procedure was developed for use with families of adolescents exhibiting behavioral problems. This procedure was designed especially for families in which little positive social interaction is occurring. The procedure attempts to maximize reinforcement for parents and to minimize "punishment" (being singled out as the person to change) of the adolescent.

During the initial interview, both parents and adolescent should be present. The therapist should determine the extent of the difficulty. He should first explain that no particular family member is the problem or responsible for the problem but that the whole family has a problem and everyone is responsible. The therapist should stress that there are no "good" or "bad" parent behaviors, that different needs exist for different families -- what works for one family doesn't for another -- and that what the therapist is concerned with is helping their particular family to learn ways they can get along better. Then he should briefly outline what will be involved -- that all parties will be required to change behaviors and to provide some reinforcers

for others. The parents must be willing to cooperate and to agree to change their behavior. All parties must be committed to work on the problem. The therapist notes that the first sign of commitment is to collect baseline data. He explains the need for baseline and how to collect the data.

At this point the parents and child are interviewed separately. Each is asked to specify in observable terms the behavior he wants altered in the other. The behaviors are listed on a baseline data card. Next, each is asked to specify positive reinforcers (especially social reinforcers) that the other is currently offering (even if at a low rate). These are also listed on the baseline data card. All parties are aware they will be observed and may be able to discern what behaviors are being observed and thereby change the behaviors (reactive nature of being observed). To avoid this as much as possible, each observer (adolescent and parent) should be instructed to occasionally randomly record marks in a blank area of the data card when the observed party is watching. In addition, each person is instructed to make a list of reinforcers he can provide the other (things he can do, particularly) and reinforcers others can provide him.

After the parties have separately defined their behaviors to observe and have made their data cards, all parties should meet again to set the time for the next session, and to reaffirm the importance of collecting the baseline data.

At the second session, the therapist should check the baseline data and verbally reinforce the parents and child for collecting the data, thus expressing their commitment to deal with the problem. Next, the therapist should explain what an exchange contract is and give some examples. Finally, using the behaviors needing change according to the baseline data and using the



reinforcers on the lists made out by each individual, the first contract is negotiated. In most cases, the therapist will have to model and prompt much negotiating behavior. All parties should be verbally reinforced for negotiating and everyone should understand that the first contract is only negotiated for the period until the next session. Each party should sign the contract and each should receive a copy of the contract. Before closing the session, the importance of continuing with the data collection should be stressed and a third session time set.

At the third session, again the therapist should verbally reinforce everyone for collecting data and reinforce them for any behavior changes. If changes are necessary in the contract these should be made and a length of time specified for the new contract.

In succeeding sessions, re-negotiations should be made with the therapist fading his role as negotiator and helping the family members develop their negotiating skills. In addition, as the behaviors are changed, the contracts should be faded. The terminal family behaviors are the development of negotiating skills so that the family may negotiate problem situations in the future without the help of therapist and formal contracts.

The parents and child should be encouraged to exchange behaviors as well as exchange reinforcers. Further, on successive contracts, they should contract for chains of behaviors and reinforcers. For example, if the child attends school all week, he may go out on Friday night; if he returns home on time, he may go out on Saturday night and if he returns home on time Saturday night, he earns a bonus -- extra allowance. An example of exchanged behaviors in a chain might be a mother agrees not to "nag" her daughter during the day; in exchange for this, the daughter washes the dishes for the mother and in

exchange for this, the mother agrees to spend an hour helping the daughter with her sewing.

The therapist should consider some of the antecedent conditions present and try to alter these in addition to altering the consequent conditions. For example, a mother's nagging may be the antecedent for a child's inappropriate behavior -- by changing the mother's behavior, the child's behavior should be altered. Also, some new antecedent conditions could be established that would enhance positive social interactions. For example, the therapist could encourage family outings. These outings could be included as a bonus clause in the contracts, i.e., if all parties maintain their agreements, then the whole family plans an activity together. These group activities could possibly increase positive social interactions among family members and provide some common experiences for conversation. Social psychological research indicates that "similarities in behaviors determine duration of social interactions and friendships" (Patterson, 1970) so if the family can be encouraged to engage in similar behaviors through group outings, then positive social interactions should be increased.

Finally, the contracts should include bonus and sanctions clauses for all parties. The sanctions should be specific but of short duration -- a child should not be "grounded" for a whole month for one contract violation. One difficulty will be sanctions for the parents; the parents must be cooperative and agree to accept sanctions for their contract violations; these sanctions could be withdrawal of reinforcers given by the child or they could be self-imposed by the parent, i.e., giving up their night out. While reinforcers in the contract should be given frequently for smaller time periods of appropriate behavior, bonuses should be given for longer periods of appropriate behavior

(a week with only one contract violation, etc.). Weekly bonuses might be points earned toward a long-term reinforcer (driver's license, guitar, etc.). For the parents a weekly bonus could be a free babysitter (the child) for a weekend night so that they might go out for the evening.

The data collection system will be dependent on the types of behaviors involved. Most behaviors can simply be recorded on data cards by the parents and child. When school behaviors are involved, enlistment of the aid of a guidance counselor and/or teachers would be appropriate. In fact, the school personnel could certify school attendance by signing a slip to be sent home or they could administer reinforcement directly by giving the child a reinforcer "ticket" (for phone privileges, dating, allowance, etc.) for school attendance and/or appropriate school behavior. With this type of program, the school could become reinforcing by being paired with tangible reinforcers.

In conclusion, a therapist and family could be quite creative in the development of the specific reinforcers and data collection system. The therapist should remember that the contracts should contain exchanged behavior and/or reinforcers (responsibilities and privileges), sanctions and bonuses for all involved parties. The family should be taught negotiating skills through modeling, feedback and verbal reinforcement. The family should be faded from the contracts when their positive social interactions are increased and when they have become skilled at negotiating. Throughout the process, the therapist should insure that all parties have "saved-face" -- that is, no one has been forced to claim sole responsibility for the problem and all are allowed to "graciously" consent to behavioral changes. Stuart and Lott (1972) suggest that the ability of the therapist to help family members "save-face" may be an important factor in the success of contracting.

### Results

Since the proposed reciprocal contracting procedure is new, only pilot case studies have been conducted to date. Three families have attempted to utilize the procedure. Results will be presented below as single-case studies.

#### CASE I

The family consisted of four teenage foster children (all girls), four pre-school children (all related to the foster mother) and the foster parents, Mr. and Mrs. G. (Mr. G. was chronically ill). Both foster parents were over 60. The caseworker (Department of Social Services) requested our assistance with the two oldest girls: Kathy, 17, and Carol, 16. The problem behaviors were arguing with each other, staying out of school, fighting at school, suspension from school, going out without permission of the foster mother and not telling the foster mother where they were going. According to the caseworker, the girls had been engaging in these behaviors for approximately a year. Mrs. G. had tried several procedures to correct the problem behaviors; she had talked with the girls about these behaviors, taken away TV privileges, and "grounded" them. One night, she refused to allow Kathy in the house because she had stayed out too late.

Mrs. G. had requested the girls be transferred to another foster home; however, she agreed to try the contracts. In conferring with her, four target behaviors were selected: arguing with each other or arguing with any other member of the household; attending school; asking permission of Mrs. G. before leaving the house; and informing Mrs. G. where they are going when they leave. Mrs. G. agreed to keep baseline on each girl separately for a week. In relation to reinforcers, Mrs. G. felt that use of the telephone, TV time, the \$1.00/week allowance, and going out would be the strongest rewards.

When interviewing the girls separately, they both expressed a willingness to participate in the contracting procedure. However, neither girl expressed any dissatisfactions with the home environment nor with the behavior of Mrs. G. One should note that under present circumstances, both girls were receiving much reinforcement non-contingently; that is, they received non-contingent allowance, they could go out whenever they desired, they could use the phone any time, they watched TV when they wanted, they attended school when they wished -- in short, they basically maintained control of the reinforcers within the environment.

At the second interview, Mrs. G. produced a blank data card and remarked that "the girls have been pretty good this week." Because of the prior frequency and seriousness of the problems, the caseworker felt it best to draw up one-way contracts in spite of the lack of any baseline data. The contracts were for the four behaviors originally picked and included sanctions and bonuses in addition to the responsibility-privilege contingency clauses.

After three weeks of the contracts, the girls were attending school regularly. Mrs. G. stated that they were doing fine. However, reports from the school and the girls indicated that at first there was some improvement but that the original problem behaviors were again occurring. Mrs. G. was not maintaining the contract contingencies -- she was afraid to withdraw reinforcers because the girls would feel she "didn't love them." Despite her verbal reports of the girls' improvement, Mrs. G. still wanted them transferred. Mrs. G. was not keeping the data or maintaining the contract contingencies. Summer was approaching -- all the girls would be out of school, and with the deteriorating condition of Mr. G., it would be difficult for Mrs. G. to provide proper supervision. Therefore, the caseworker decided to transfer the children.

CASE II

The family consisted of five foster children, all boys ranging in age from two to eleven and the foster parents, Mr. and Mrs. R., both over 60. The problem child was Adrian, age 11. According to the referral information, he constantly aggravated the other children by starting fights, tearing up their toys, making the smaller ones eat soap, throwing rocks, etc. The foster parents stated he lied frequently and would not obey them. In addition, when not given what he wanted, he would "lose his temper," i.e., refuse to eat, "tear up anything in his path." The caseworker reported the behaviors had been occurring about a year. The foster parents had attempted several procedures to correct the situation: restricting him to his room, talking with him about his behaviors, giving him special attention (not in response to his misbehavior), confronting him with his lies and spanking him.

The initial interview was held with both Mr. and Mrs. R. The R.'s decided to first concentrate on three of Adrian's inappropriate behaviors:

1. disobeying a request from either Mr. or Mrs. R. (i.e., when Adrian is asked by either Mr. or Mrs. R. to perform a task and he does not perform the task, or when he is asked to stop a behavior and he does not cease);
2. lying;
3. "picking" on the younger children (that is, when Adrian hits, pushes, takes a toy away from, calls a name, forces to eat soap or in any manner aggravates the younger children -- this does not include destroying his own toys or stomping to his room or other behaviors which aggravate the R.'s).

While there were a number of other inappropriate behaviors which Adrian manifested, these three were selected as the first to be altered. Three behaviors were selected as positive behaviors which should be increased:

1. making up bed by 10:00 a.m.;

2. returning belongings (i.e., when Adrian takes a possession somewhere and brings it back; for example, when he takes his coat to the park with him, he remembers to bring it back);
3. playing with the younger children 15 minutes with no trouble.

The R.'s were both instructed how to keep the data (on a 4x6 index card) on a daily basis. They were also asked to record, on the reverse side, reinforcers and punishers for Adrian, and reinforcers for themselves which Adrian could provide. The baseline data was collected for one week.

In talking privately with Adrian, he could think of nothing he would like the R.'s to do differently. He could never comprehend the subjunctive "if" and persevered with the response "He (She) won't" to suggestions of behaviors for the R.'s. Adrian did offer a list of reinforcers for himself -- e.g., going home for visits, money, letters from home, etc. However, he could not think of anything he could do to help the R.'s because "I don't have any money" and "They won't let us do anything." (Mr. R mentioned he preferred to cut the grass himself and Mrs. R. stated she doesn't like Adrian to do the dishes because he doesn't do a good job.)

During the week of baseline, Mrs. R. mentioned that Adrian had noticed the data card and asked her about it. She told him she was keeping track of how well he behaved -- if he was behaving there wouldn't be many marks on the card. This may account for the drop in inappropriate behavior which occurred at the end of the baseline week (due to the reactive nature of being observed).

From the baseline data, it appeared that Adrian was performing the three target behaviors about nine times per day. After much discussion, we decided that Adrian needed immediate reinforcement and that a successive reduction of the target behaviors would have to be used since the frequency was fairly high. A criterion level of two or less behaviors was set for each of the

target behaviors. TV time, money and bike riding were used as the immediate daily reinforcers. By earning the daily reinforcers for each behavior at least five days during the week, he earned the bonus of a letter from home. "Picking" had the specified sanction of 15 minutes in his room. Both Adrian and Mrs. R. agreed and signed the contract.

Data for the first contract week showed considerable improvement (see Figure 1); the inappropriate behaviors dropped from an average of 9.3 times per day to 1.4 occurrences per day; his bed-making increased from two out of seven days in the baseline week to 7 out of 7 days of the first contract week. Mrs. R. stated that Adrian was at least trying to behave better; she indicated pleasure that he was putting forth some effort to behave appropriately. She also noted that reminding Adrian of the contract terms was often a good prompt and prevented him from misbehaving. She stated she used this method when she observed behaviors which usually lead to misbehavior.

At the end of the second contract week, Mrs. R. stated that Adrian's behavior was much improved. He earned the bonus of another letter from his mother. In reviewing the contract terms with Adrian, he appeared confused about the contingencies. By talking with Mrs. R., it became apparent that she was not correctly maintaining the contingencies. She was afraid that if she did not allow him to ride his bike as long as he wanted or watch TV as much as he wanted, he would tell the neighbors and they would think she was not a "good" foster mother -- i.e., she did not properly care for the foster children.

During the middle of the following week, the caseworker received notification that Adrian had been accepted to an Evaluation-Treatment Home for which she had made application several months before. Despite his improvement under the contract, the foster mother felt she needed a "rest" (understandable for



a woman over 60 handling five young boys), so Adrian was transferred to the Home.

### CASE III

The family consisted of two girls (ages 8 and 14) and their mother Mrs. G., recently divorced. Mrs. G. requested help with her 14-year-old daughter, Ann. There had been some school problems and many home problems -- arguing, defying the mother, calling the mother names, smoking, and on one occasion, running away from home. In addition, Mrs. G. did not like some of Ann's friends (because of "police" involvement) nor some of the places Ann liked to go (because of possible drug involvement). These problems had been occurring for approximately seven months.

During the initial interview both Ann and Mrs. G. agreed to try reciprocal contracting. Ann was quite enthusiastic about the prospect of finally having some input into the "rules" of the house. She specified four behaviors which she wanted her mother to decrease:

1. "snooping" in her room - when Mrs. G. enters Ann's room without permission and goes through Ann's drawers and other belongings;
2. "lectures" -- when Ann asks Mrs. G. a specific question such as "May I go out" and Mrs. G., instead of giving a direct answer, verbalizes at length about the problems involved, how she could not do such things when she was that age, etc.;
3. criticizing Ann's clothes or make-up; and
4. criticizing Ann's friends.

Ann could think of nothing she wanted her mother to increase. She agreed to keep baseline data on the four inappropriate behaviors and if she thought of any others, she would write them down and record data on them, also. In addition, she agreed to make up a list of reinforcers she wanted and a list of reinforcers she could offer her mother.

Mrs. G. delineated three behaviors she wanted decreased in Ann:

1. sequence of name calling followed by door slamming -- Ann calls her mother names ("Hitler," "dictator"), leaves the room, stomps down the hall and into her bedroom and slams the door behind her;
2. verbal pleading after definitive answer to a question such as "Can I go over to \_\_\_\_\_"; and
3. "street walking" -- Ann and her friends walk around the neighborhood in the evening.

Mrs. G. wanted Ann to increase three behaviors:

1. having Ann's friends visit at the G.'s home (for a minimum of 15 minutes);
2. change bra daily (Mrs. G. stated Ann changes all her clothing daily but her bra which she wears about a week at a time); and
3. practicing the piano.

Mrs. G. agreed to keep baseline data for a week and to make up a list of reinforcers for herself and reinforcers for Ann.

After talking with Ann and Mrs. G., it was apparent that a chain of inappropriate behaviors were occurring. The chain was often begun by a request or question from Ann. The mother then began "lecturing" which served as an S<sup>D</sup> for Ann's name-calling behavior and/or an argument; the chain of responses ended with Ann storming to her room, slamming the door. Further, Mrs. G. wanted Ann to have her friends come to their house to visit rather than Ann always going to her friends' houses. However, the stimulus situation at home -- critical remarks about Ann and her friends, arguing, Mrs. G. searching Ann's room, Mrs. G. calling the friends' parents if she found them smoking, etc. -- was not conducive to friends visiting. Ann was embarrassed to invite her friends over and the friends did not want to come.

At the second interview, the baseline data was reviewed. Ann had added three more inappropriate behaviors to her data card: "picking" (caustic

remarks directed at Ann by her mother); arguing (on the part of both); and not paying attention (Mrs. G. obviously ignoring Ann when Ann tried to get her attention). According to Ann's data, her mother was exhibiting inappropriate behavior approximately 9.7 times per day; Mrs. G.'s data showed that Ann was very infrequently engaging in the three inappropriate behaviors selected by Mrs. G. (Ann engaged in each behavior once during the baseline week). Ann changed her bra once during the week, had no friends visit and practiced the piano 5 days. The data indicated that the daughter was behaving well but that the mother was engaging in a high amount of inappropriate verbal behavior. Arguing, the one behavior that both engage in simultaneously, occurred 11 times during the week.

Examination of the reinforcer lists indicated that Mrs. G. had listed 4 reinforcers for herself and 3 for Ann. Yet, Ann had 8 reinforcers for herself and 13 reinforcers she could provide her mother! Two of the 3 reinforcers Mrs. G. listed that she could provide for Ann were material reinforcers (clothes, records); yet, all of Ann's list except one item were activities she could do, e.g., wash dishes, vacuum, etc.

During the session, Mrs. G. exhibited much of her inappropriate verbal behavior -- made critical remarks of Ann, accused her of lying, criticized her friends. Upon looking at Ann's list of desired reinforcers, she immediately picked out those that she refused to agree to and began "lecturing" about them. Ann remained fairly calm despite the aversive  $S^D$ 's her mother was presenting. Ann was more willing to bargain than was Mrs. G., i.e., Ann made more conciliatory offers while Mrs. G. remained adamant in her original position.

Mrs. G. felt that bra changing and "street walking" were significant

behaviors to deal with while Ann viewed arguing (on the part of both) as the most significant behavior to be altered. The therapist was able to convince Mrs. G. that the "street walking" was quite normal behavior for teens and that the natural consequences (colder weather, darker earlier) would eliminate the behavior, anyway. Ann said she had two comfortable bras and could reasonably change every other day if her mother washed clothes at least every four days (which her mother stated she did).

After some negotiations, both Mrs. G. and Ann decided on a contract. Bra changing and arguing were included in the contract along with "lecturing" and having friends to visit at their home. Reinforcers for Ann that were utilized were a choice of records or clothing, nights out, and a later curfew time. Reinforcers for Mrs. G. included having Ann begin supper (Mrs. G. works until 5:00 p.m.) and a night out. Sanctions and a bonus of a weekend shopping trip were included. Both seemed pleased and agreed to try their best for the next week.

At the end of the first contract week, it was apparent that the contract was working and that the inappropriate behaviors were decreasing (see Figures 2 and 3). The mother's inappropriate behavior decreased from an average of 9.7 times per day to an average of .4 per day. Ann changed her bra once during the baseline week but changed every day during this first contract week. While none of Ann's friends visited during baseline; on two nights of the first contract week, Ann had her friends over to visit. During baseline week, Ann and Mrs. G. argued 11 times; after initiation of the contract, there was only one argument the whole week. We looked at the sequence which produced the argument and the actual sequence of behavior occurring during the argument. Again, the mother was emitting S<sup>D</sup>'s which elicited the daughter's inappropriate

behavior. We concluded that if the mother would let the natural consequences occur, the behavior would be corrected without the emotional components of an argument and punishment. Both Ann and Mrs. G. earned their bonuses and agreed they wanted to use the same contract for another week.

At the end of the second contract week, the data showed that the inappropriate behaviors had decreased slightly more than the first contract week: mother's inappropriate behavior to .14 occurrences per week; arguing to 0. Ann's friends visited three times during the week and she changed her bra every day. The contract was renegotiated. The number of responses required for reinforcement were increased and the value of the reinforcers increased (Ann can now earn dating privileges). This contract is still in effect.

#### Discussion

Reciprocal contracting could not be utilized in the two foster family cases since in both cases, the foster children would not specify behavioral changes needed in the foster parents. In the first case, it appeared that the two girls were maintaining control of the reinforcing events in the environment and therefore may not have wanted any changes within the environment. In the second case, the boy was unable to comprehend the use of the subjunctive "if" and envision his foster parents behaving differently in order to specify how they should behave or what they should do differently. In both cases, the fear of reprisal from the foster parents or fear of removal from the foster home could have been operating. While theoretically reciprocal contracts should be more advantageous for adolescents since they remove the "blame" from any one person and allow the adolescent to express his dissatisfactions within the environment, from a practical standpoint with foster care children, they may not always be feasible.

A further problem encountered is one which would be a problem with any behavioral program -- that is, the maintenance of contingencies. Although she wanted the behaviors changed, one of the foster mothers did not wish to maintain the contingencies because the girls would think she didn't love them; the other foster mother feared peer pressure -- what the neighbors might think. This is a critical, practical problem since as long as such fears exist, the parents will not maintain the contingencies in a systematic manner.

A final problem deals with data collection. The first mother while verbally agreeing the data was necessary would not collect the data. The mother in the second case did an excellent job of data collection during baseline. However, since the mother continually described the boy's inappropriate behavior during the contract weeks, it never was clear whether the reported drop in his inappropriate behavior was an accurate assessment or if the mother just tired of the data collection and recorded less. If the latter was true, this would suggest a need for reciprocal contracting as opposed to one-way contracting so that the parent would receive some positive reinforcement which might maintain his interest in the entire contracting system, including the data collection aspect.

The problems encountered with the two foster families would suggest some pre-existing conditions necessary for reciprocal contracting. One, the parents must be willing to maintain the contingencies and have no fears that would inhibit maintenance of the contingencies. Secondly, the child must feel free to voice his dissatisfactions with the environment and with the behavior of his parents. Finally, the child must be capable of comprehending change on the part of his parents -- he must view the parents as changeable. These conditions existed in the third family which was able to successfully

utilize the reciprocal contracting procedure.

When these conditions do not exist, it might be better to begin with a one-way contract and, if possible, ease into a reciprocal contract. There are several situations in which this might be advisable. For instance, when the child has difficulty labelling behaviors to be changed in the parents, a one-way contract could be initiated. The child would gain some experience in operating under contingencies and having his behaviors specified. The therapist should become a positive reinforcer for the youth so that antecedent conditions are established within which the youth feels free to specify parent behaviors to be changed. On the other hand, parents may be unwilling to change their behavior or have the child specify behaviors for them to change. One-way contracts could be started; the parent's behavior is changed with the one-way contract to some extent (his reinforcing behavior is altered). The therapist should become a positive reinforcer and model for the parent so that a discriminative stimulus exists for the parent to agree to change his behavior. Other situations might necessitate the initial use of one-way contracts followed by reciprocal contracts.

Thus far, the problems encountered in reciprocal contracting with the foster families may be unique to the two particular cases involved. The procedure was implemented successfully with a "natural" family. The foster parent has the option of having the child removed from the home; there is little "vested interest" in the treatment procedure since if it does not appear to work, the child or therapist can be blamed and the child removed from the home (as happened in the two reported cases); the foster parent is reinforced both by the removal of the child and the fulfillment of his original assessment of the child as "bad." The "natural" family, however, must deal with the

situation -- they do not have the option of removing the child. Therefore, a "natural" family may exhibit more motivation to cooperate and implement the contracting procedures; the parent's reinforcement must come from the contract and the improved behavior of the child, not from escape behavior.

### Conclusion

The theoretical framework of Thibaut and Kelley (1959) and Tharp and Wetzel (1969), the experimental findings of Reid (1967) and Patterson and Reid (1970), and the conjectures of Stuart and Lott (1972) would suggest the use of reciprocity in behavioral contracts with families of adolescents. Reciprocal contracts allow both parties to receive reinforcement -- exchange "goods" and establish a balance of trade. The child can express his dissatisfactions, as well as the parents. While neither party is blamed, both are required to change their behavior. Since no blame is placed and since both parties are required to change, no one need "lose face" by being forced to accept blame and being the only one asked to change behavior. The skills of negotiation are taught to the family so generalization should be enhanced.

The technique was very successful with a "natural" family. However, despite the theoretical advantages, some practical problems were confronted in applying the technique with foster families. Further research should be done on the use of this procedure with "natural" families of adolescents and with a larger sample population.



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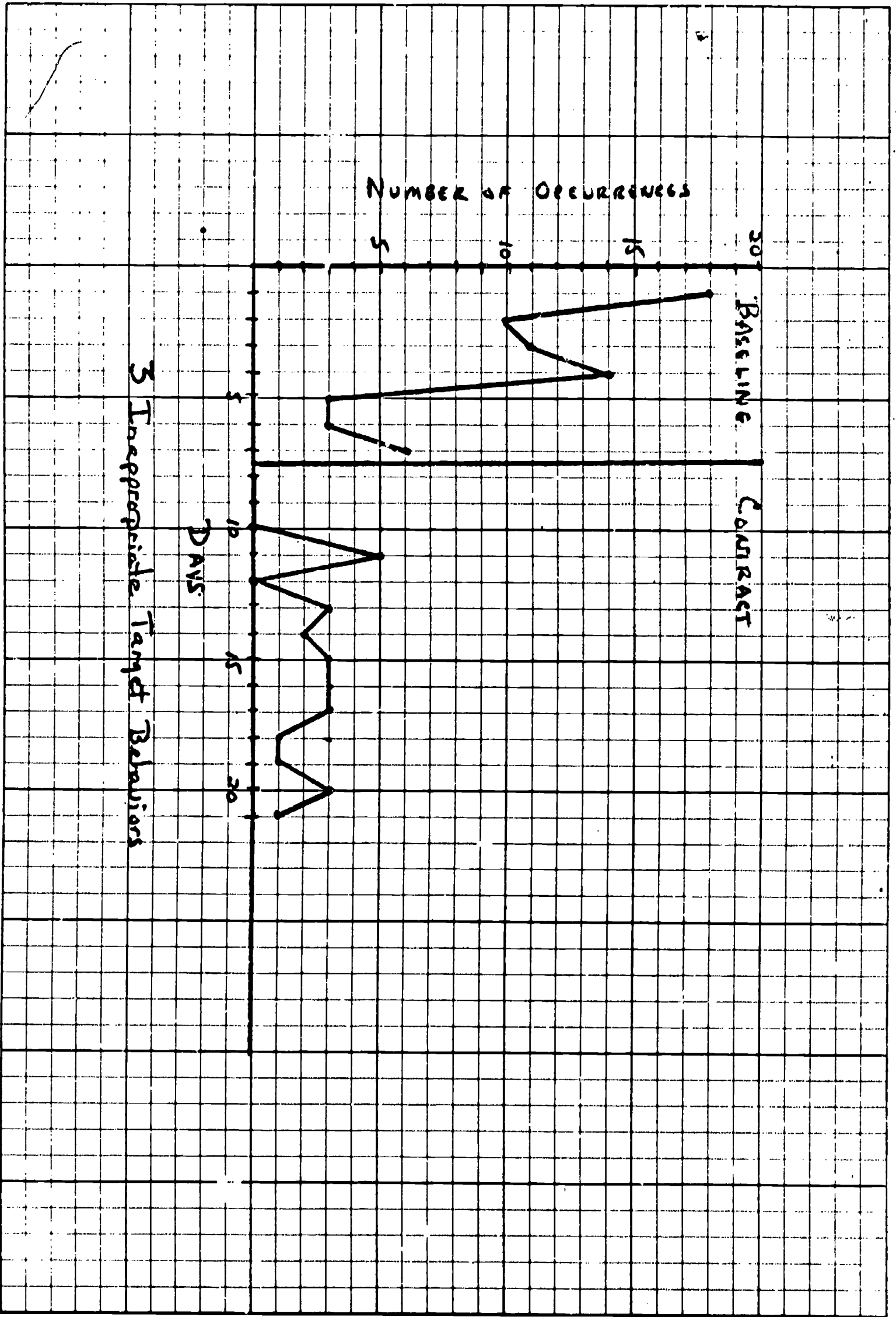
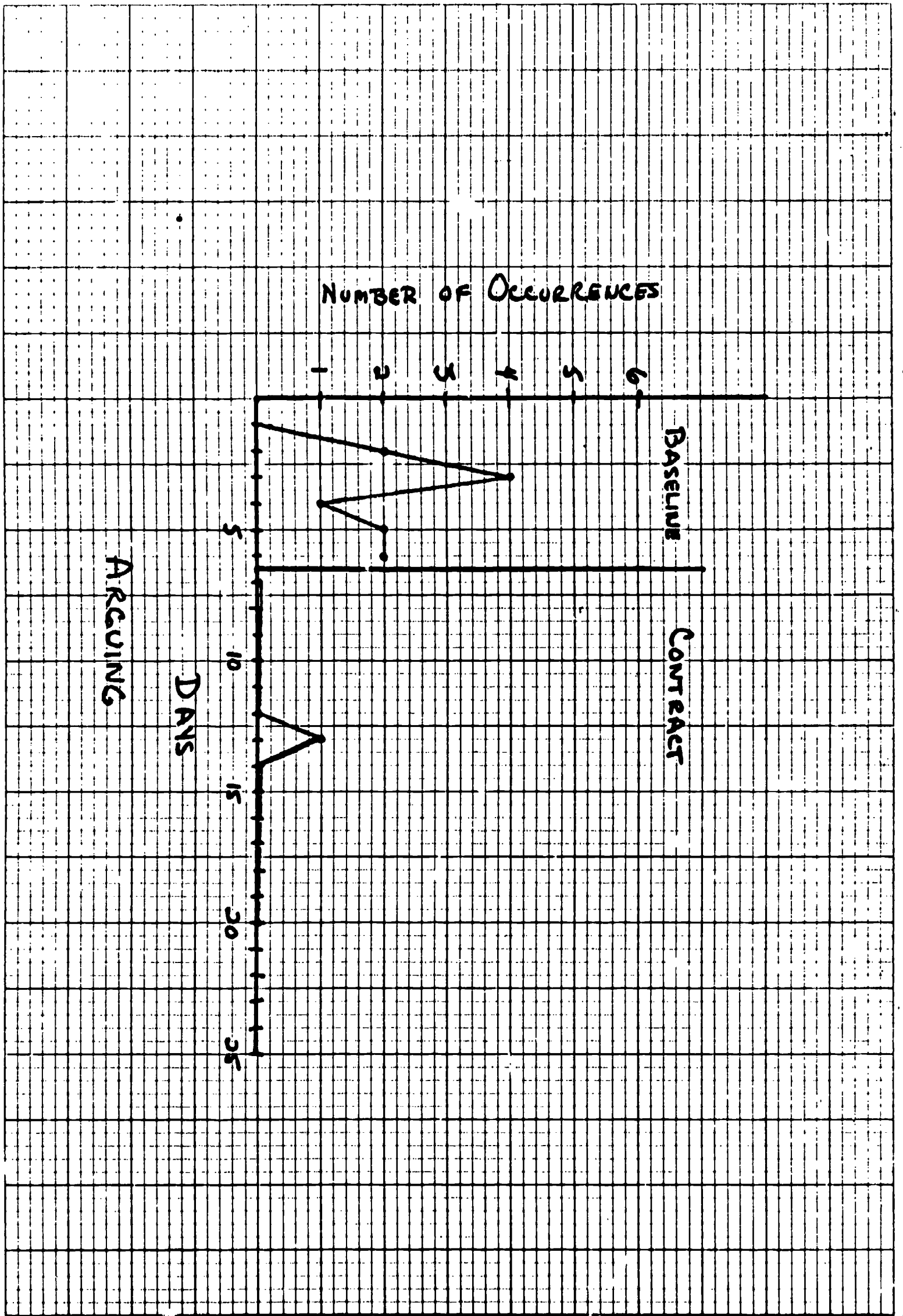


Figure 1. Combined inappropriate behavior for boy in Case II

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Figure 2. Arguing Behavior of Mrs. G. and Ann (Case III)



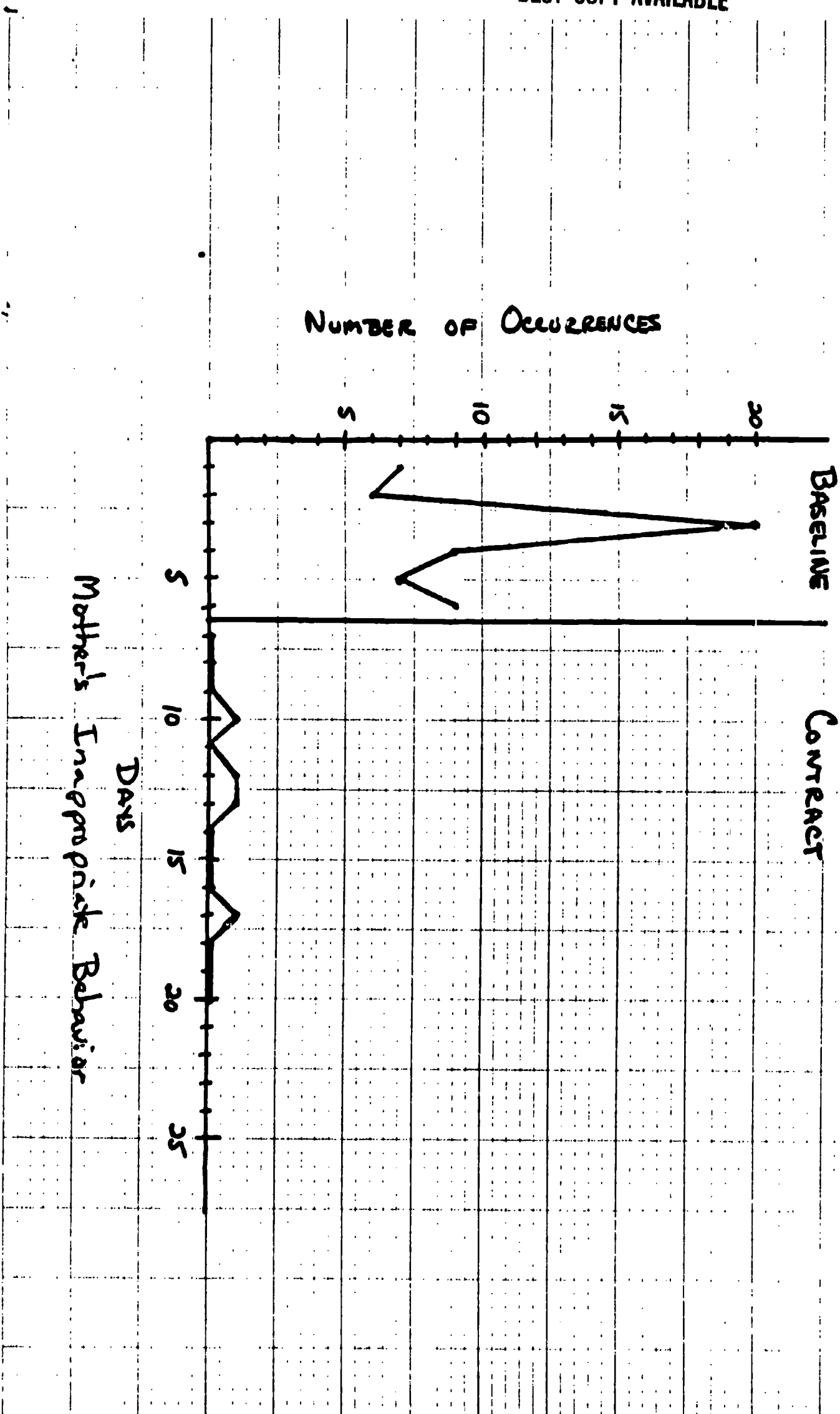


Figure 3. Combined inappropriate behavior of Mrs. G. (Case III)