

Delay of Gratification as a Function of Exchange Values and Appetitive Values of the Rewards¹

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This study examined the manner in which the probability of delaying gratification is affected by the exchange values and the appetitive values of the rewards offered. Several delay-of-gratification questions were used, requiring a choice between an early small reward and a reward twice as great due at a later time. A total of 6,799 fourth- and sixth-grade Israeli public school pupils participated in the study. Results consistent across sexes, grades, and two delay conditions ("now" versus "in a week from now" and "in a week" versus "in a month") indicated that the tendency to delay gratification is directly related to the exchange values of the rewards offered but inversely related to their appetitive values. Several implications of these results for the Value X Expectancy model of delay behavior were discussed.

Two major theoretical frameworks have been employed to account for behavior in situations involving delay of gratification: the conflict view and the value-expectancy model. The conflict position is based on the psychoanalytic model. It portrays delay behavior as an outcome of the cardinal conflict in personality between the impulsive, uncontrolled urge for

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immediate gratification (the pleasure principle) and realistic considerations pressing toward impulse control and delay (the reality principle). The second position, Value X Expectancy, views delay behavior as stemming from an evaluation of the utilities of the alternative courses of action, in terms of the subjective values of the outcomes involved and their respective probabilities. The latter position has been presented by Mischel in connection with his earlier studies on delay-of-gratification behavior (Mischel, 1966).

The value-expectancy position affords several straightforward predictions, which have been borne out by experimental findings. Thus preference for a delayed reward over an immediate reward was found to vary with the relative subjective value of the delayed reward (Mischel, Grusec, & Masters, 1969) and with variables assumed to affect its subjective expectancy (Mischel, 1966). The conflict model (e.g., Rapaport, 1951), although acknowledging the role of utility considerations in delay behavior, has put a distinctive emphasis on the equally important role of the postulated impulsive drive for immediate discharge that opposes reality-oriented functioning. This impulsive urge has often been assumed to lead to the preference for a tempting immediate reward over a greater reward in the future, even when delay is viewed by the individual as the wiser course to choose. Everyday experience is replete with examples of apparently "irrational" acts, where a stimulus having appetitive appeal appears to prevail over reality-oriented utility considerations. Indeed, in the layman's view as well as in psychoanalytic discussions, the delay of gratification is more intimately tied with such concepts as "impulse control," "will-power," "ego strength," and the like, than would follow from the value-expectancy approach.

The emphasis of the conflict model on resistance to temptation as a factor in delay behavior suggests several predictions that could not readily be derived from the value-expectancy model. One such prediction constitutes the subject of the present research. Where resistance to temptation is concerned, the critical attribute of a reward is its appetitive appeal, which would appear to depend on the degree of peremptoriness of the motivation for which the reward provides a consummatory object. This attribute should be clearly distinguished from the "exchange value" of an incentive, expressed, for example, in terms of monetary worth. Thus, although a chocolate bar may have the same exchange value as a box of crayons, it may be assumed to have greater appetitive appeal for most individuals. Distinctions similar to that suggested here between exchange value and appetitive appeal have been offered by others, and there is evidence that the two attributes may affect behavior in a differential

manner (Mischel, 1974; Nisan, 1972). Rapaport (1960) offered a general theoretical framework that provides an analysis of the attribute herein denoted as appetitive value in terms of the hierarchy of motivational derivatives and the concept of neutralization.

The present study examined a prediction based on this distinction, using several straightforward, hypothetical, Mischel-type delay-of-gratification questions. Let us examine the following two hypothetical delay questions: (a) Which would you rather have, a chocolate bar now or two in a week from now? (b) Which would you rather have, one box of crayons now or two in a week from now? What may be predicted regarding the relative incidence of delay choices in the two situations?

If the chocolate bar is perceived to have the same exchange value as the box of crayons, then the value-expectancy model would not lead us to expect any difference between the two choices. This is true, assuming of course that the pertinent value in the value-expectancy equation is the exchange value, and that the expectancy parameter is unaffected by the nature of the outcomes involved. From the conflict model, however, it would follow that since a chocolate bar presumably has stronger appetitive appeal, the willingness to delay gratification should be weaker in the chocolate bar situation than in the crayon box situation.

The effect predicted by the conflict model, if indeed obtained, may still be accommodated by the value-expectancy model by assuming that the appetitive appeal of a reward is equivalent to an addition to its exchange value. This argument would imply that the same effect on delay probability obtained by increasing the appetitive appeal of the outcomes would also be obtained by increasing their exchange values. Thus, in the one-early versus two-later choice, lesser delay will be predicted the higher the exchange values of the rewards offered. On purely intuitive grounds, however, we would expect the reverse relationship: Since in the one-early versus two-later choice the compensation for the delay increases with the value of the rewards, delay probability is expected to likewise increase (one would be more willing to delay in a choice between \$10 today and \$20 tomorrow than in \$1 today versus \$2 tomorrow).

The design of the present study was therefore as follows: A number of hypothetical Mischel-type questions were formed by varying either the appetitive values or the exchange values of the outcomes involved. It was hypothesized, first, that the probability of delaying gratification will increase with the increasing exchange values of the outcomes, and second, in accord with the conflict model, that the probability of delaying gratification will increase with the decreasing appetitive values of the outcomes.

Several additional hypotheses were evaluated with the aim of shedding some light on the manner in which appetitive and exchange values affect delay behavior. The first of these hypotheses pertains to the effects of age. Delay behavior has been found to increase with age (Mischel, 1966). If this development is seen to reflect an increase in ego strength, impulse control, or the ability to resist temptation, then the predicted effect of appetitive appeal on delay behavior would be expected to decrease with age. At the same time, exchange value may be expected to have stronger effects on older than on younger children's choices. This latter hypothesis is based on the assumption that older children are better equipped with adequate utility considerations.

A second hypothesis concerns sex differences. Two previous studies (Koriat & Nisan, 1977; Nisan, 1976) suggested that when delaying gratification is favored by utility considerations or by social norms, girls tend to feel freer than boys to seek immediate gratification. On the basis of these observations it was predicted that the effects of appetitive appeal on delay behavior would be stronger for girls than for boys, whereas the reverse pattern would obtain for the effects of exchange value.

A third hypothesis concerned the effects of delay on the appetitive appeal of a reward. The predicted relationship between delay probability and appetitive appeal may be conceptualized in terms of the delay-amount trade-off function characteristic of a reward: Delay is more detrimental to the attractiveness of an appetitive reward than to that of a less appetitive reward. On the basis of this proposition, it was hypothesized that the effects of appetitive appeal that are expected to obtain in a "now" versus "in a week" choice would be considerably scaled down when the choice is transformed into "a week from now" versus "in a month from now." In this latter situation exchange value would be the main determinant of delay behavior.

METHOD

The questions upon which the present report was based were included in a questionnaire that was administered as part of a comprehensive study on school achievement and its correlates. This study was conducted on a nationwide sample of Israeli children (Minkovich, Davis, & Bashi, 1975).

Subjects

The results to be reported are based on a total of 6,799 children, 1,663 boys and 1,715 girls from fourth grade, and 1,628 boys and 1,793 girls from

sixth grade. This number comprised all of the fourth- and sixth-graders who participated in the study except those for whom data on their sex or on any of the five critical questions were missing.

Materials

The questions of the present study were part of a questionnaire that involved several motivational and personality variables, such as school motivation, attitude toward school, self-esteem, and internal-external control. The questions pertinent to the present research had the same general format, requiring a choice between an early small reward and a later reward that is twice as large. These questions appeared in two different versions. In about one-half of the questionnaires, the Immediate-Week (IW) condition, they appeared in the following format (translated from the Hebrew): "Suppose you were to receive a prize, which would you choose, (a) (the smaller reward) now, or (b) (the larger reward) in a week from now?" In the other half, the Week-Month (WM) condition, the questions were similarly phrased except that the choice was between the smaller reward "in a week from now," and the larger reward "in a month from now."

The five questions differed in terms of the rewards offered, as follows:

1. Chocolate: One chocolate bar versus two chocolate bars.
2. Crayons: One box of crayons versus two boxes of crayons.
3. Money 1: Half a lira versus one lira.
4. Money 2: 5 liras versus 10 liras.
5. Money 3: 25 liras versus 50 liras.

The three Money questions were intended to represent three different levels of exchange value. The Crayons, Money 1, and Chocolate were intended to represent different degrees of appetitive appeal for the typical child in the population under study. The choice of the latter three rewards was based on a pilot study that indicated that children of these ages perceived one chocolate bar, a box of crayons, and half a lira as having equal exchange value.

RESULTS

Figures 1 and 2 present the proportion of children choosing the delayed reward in conditions IW and WM, by sex and grade. These results are presented in two arrangements of the tested situations; in Figure 1, situations are ordered according to increasing appetitive value, and in

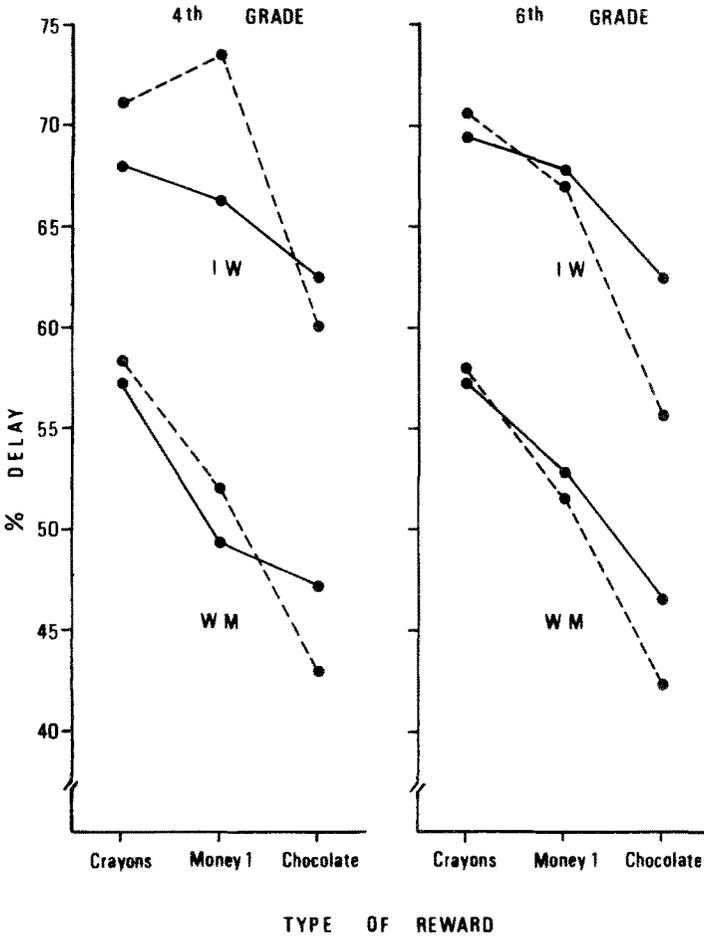


Fig. 1. Proportion of delay responses as a function of the appetitive appeal of the rewards, by sex, grade, and condition. The solid line represents males and the broken line females.

Figure 2, according to increased exchange value. Practically the same trends emerge in both conditions, and in all sex-by-age groups: (1) The tendency to delay gratification decreases as the appetitive appeal of the alternatives offered increases. Thus, except for one discrepancy (condition IW, fourth-grade females), the tendency to delay is greatest in the Crayons situation, next greatest in the Money 1 situation, and least of all in the Chocolate situation. (2) The tendency to delay increases with the exchange value of the alternatives offered. Thus, across all groups and conditions, the greatest delay is obtained for Money 3 and the least for Money 1.

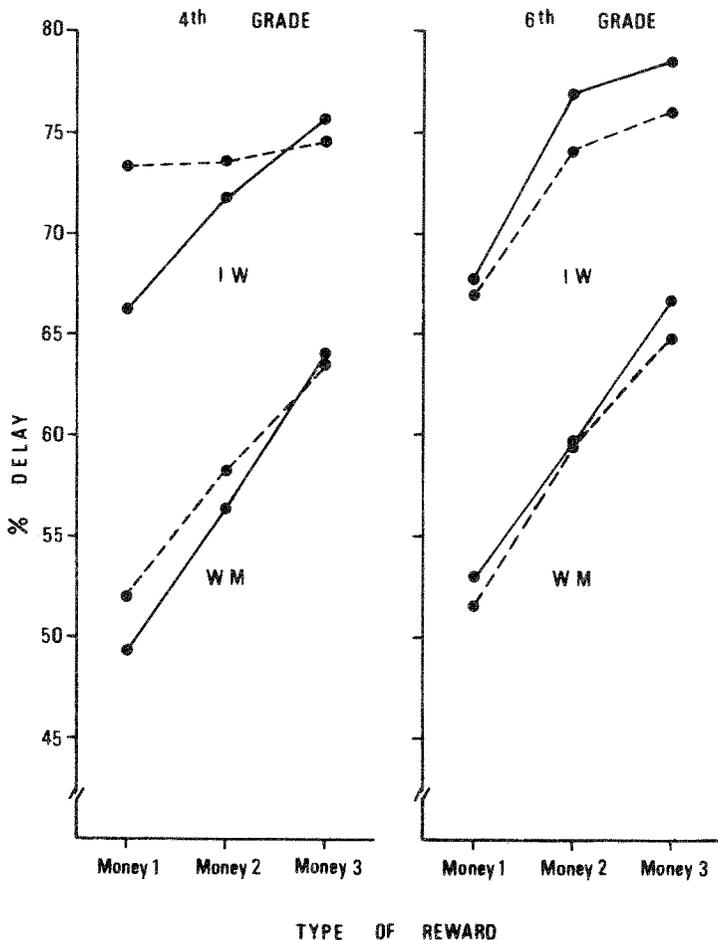


Fig. 2. Proportion of delay responses as a function of the exchange value of the rewards offered, by sex, grade, and condition. The solid line represents males and the broken line females.

Appetitive Appeal and Delay

Table I presents the number of subjects by group, sex, and grade, displaying each of eight possible patterns of choices for the three situations representing different degrees of appetitive appeal. These data convey information regarding both intraindividual consistency and systematic shifts in delay responses to the three situations. With respect to the first issue, the data of Table I reveal a considerable consistency in delay behavior in all groups. Thus, across grades and sexes, 63.1% of the children in con-

Table 1. Frequency of Children Displaying Different Choice Patterns for Chocolate (Ch), Money 1 (M1), and Crayons (Cr), According to Sex, Grade, and Condition^a

Type of reward		Condition IW						Condition WM					
		Grade 4			Grade 6			Grade 4			Grade 6		
		M	F	All	M	F	All	M	F	All	M	F	All
Ch	I	126	114	150	139	529	238	241	253	260	992		
	D	71	54	55	85	265	87	96	54	91	328		
	I	41	68	40	67	216	55	76	49	83	263		
	D	65	88	62	105	320	72	103	79	86	340		
	I	30	15	20	18	83	39	31	26	13	109		
	D	45	33	38	52	168	70	66	50	73	259		
	I	61	37	38	38	174	34	28	19	23	104		
	D	368	402	412	388	1570	261	263	283	272	1079		
All		807	811	815	892	3325	856	904	813	901	3474		
Cochran's Q		10.17	68.09	22.30	80.50	155.51	34.58	74.22	42.40	81.66	221.42		

^aI = immediate or earlier reward preferred, D = delayed reward preferred.

dition IW and 59.6% in condition WM made the same choice in all three situations. For condition IW the contingency coefficients were as follows: .45 between Chocolate and Money 1, .42 between Chocolate and Crayons, and .39 between Money 1 and Crayons. The respective contingency coefficients for condition WM were .41, .46, and .41. The degree of intraindividual consistency did not seem to vary in any systematic manner as a function of age and sex.

Cochran's test (Cochran, 1950) was used to evaluate the significance of the differences in the tendency to delay gratification in the three situations. The bottom row of Table I contains the Q statistic obtained for each of the groups. With two degrees of freedom, a Q of 9.21 is significant at the .01 level. Accordingly, the results indicate that for *all* condition by grade by sex combinations, the tendency to delay gratification differs significantly for the three situations representing different degrees of appetitive appeal. Chi-square analyses of changes (McNemar, 1962), comparing pairs of situations, indicated that the Chocolate-Crayons difference is highly significant for all condition by grade by sex groups (across grades and sexes $\chi^2 = 126.99$ for condition IW, and $\chi^2 = 233.96$ for condition WM). The Chocolate-Money 1 difference is significant for all groups except fourth-grade males in condition WM (across grades and sexes $\chi^2 = 102.49$ for condition IW, and $\chi^2 = 56.39$ for condition WM). The Money 1-Crayons difference, however, tends to be nonsignificant for the IW condition groups but is significant for all WM groups ($\chi^2 = 2.14$ for IW and $\chi^2 = 50.27$ for WM).

In conclusion, the results suggest that the tendency to delay gratification is inversely related to the appetitive appeal of the incentive offered. This relationship seems to hold rather consistently for both sexes, both grades, and both conditions, with a few minor differences, which will be discussed below.

Exchange Value and Delay

Table II presents the frequency of children displaying each of eight choice patterns in the three money choice situations representing different levels of exchange value. The intraindividual consistency is again rather noteworthy: 68.8% in condition IW and 68.3% in condition WM made the same choice in the three money conditions. The contingency coefficients for condition IW were as follows: .38 between Money 1 and Money 2, .38 between Money 1 and Money 3, and .53 between Money 2 and Money 3. The respective coefficients for condition WM were .52, .43, and .55. Once again, there was no systematic variation in the intraindividual consistency as a function of sex or grade.

Table II. Frequency of Children Displaying Different Choice Patterns for Money 1 (M1), Money 2 (M2), and Money 3 (M3), According to Sex, Grade and Condition^a

Type of reward	Condition IW						Condition WM						
	Grade 4			Grade 6			Grade 4			Grade 6			
	M1	M2	M3	Males	Females	All	Males	Females	All	Males	Females	All	
I	I	I	I	101	115	110	108	434	237	236	216	137	926
I	I	D	I	37	17	31	30	115	69	83	71	67	290
I	D	I	I	29	18	19	20	86	18	18	14	15	65
I	D	D	I	96	73	112	129	410	110	97	82	118	407
D	I	I	I	33	49	31	46	159	27	38	21	36	122
D	I	D	I	47	41	25	40	153	40	20	20	25	105
D	D	I	I	25	31	24	33	113	26	37	19	29	111
D	D	D	D	430	474	472	479	1855	329	375	370	374	1448
All				807	811	815	892	3325	856	904	813	901	3474
Cochran's Q				32.02	.79	55.94	35.77	99.06	82.14	56.58	84.40	75.48	293.89

^aI = immediate or earlier reward preferred, D = delayed reward preferred.

Cochran's Q statistics, which appear at the bottom of Table II, indicate that the differences among the three situations are significant for all groups except fourth-grade females in condition IW. This group yielded a deviant pattern (see Figure 1 also). Chi-square analyses of changes indicate that Money 1 elicits significantly less delay behavior than either Money 2 or Money 3 for each of the remaining seven groups, and Money 2 elicits significantly less delay than Money 3 in all groups but sixth-graders in condition IW.

In conclusion, the results suggest that in a choice between a small early reward and a reward twice as large later, the probability of delaying gratification increases with the increasing exchange values of the rewards.

Effects of Grade, Sex, and Condition

In this section we shall examine the manner in which age, sex, and condition may interact with appetitive value and exchange value in determining delay probability.

With respect to the effects of age on delay behavior, the results appear to indicate comparable overall probabilities of delay responses for fourth- and sixth-graders. Thus, across all five situations tested, the average percentage of delay responses in condition IW was 69.7% for the fourth grade and 69.8% for the sixth grade. The respective percentages for condition WM were 54.9% for fourth-graders and 55.9% for sixth grade. This finding may appear inconsistent with the reported increase in delay probability with age; there is some evidence, however, that the major developmental changes in delay behavior take place prior to age 10 (Mischel & Metzner, 1962).

It was hypothesized that the effects of appetitive value on delay behavior would be stronger for younger than for older children. The results, however, do not support this hypothesis. One interpretation, consistent with the finding of no difference in overall delay between fourth- and sixth-graders, is that our youngest subjects were already too old for the hypothesized interaction to manifest itself. Inspection of the Q statistics presented in Tables I and II, however, suggests an alternative interpretation. It appears that the choices of the sixth-graders varied more as a function of appetitive value and of exchange value than did the choices of the fourth-graders. This trend is consistently obtained across both conditions IW and WM. These results may simply indicate that the five situations employed were less clearly distinguished by the fourth- than by the sixth-graders. Whether or not this lack of discrimination is due to the hypothetical-verbal nature of the situation is unclear; if it is, the hypothesis regarding the inter-

action between age and appetitive value is worth reexamining with actual rather than hypothetical choices.

With respect to the effects of sex, inspection of the Q statistics of Tables I and II suggests trends that are consistent with the interactions predicted. For both grades and both conditions the effects of appetitive appeal on delay behavior were stronger for females than for males. With regard to exchange value, however, the effects appear stronger for males than for females, and this is consistently so for both grades and both conditions.

To evaluate the significance of the interaction between sex and appetitive value, only the two extreme situations, Chocolate and Crayons, were examined. For these situations, only those subjects exhibiting inconsistent patterns of choices were considered, and their relative distribution between the two types of inconsistent patterns was compared, using chi-square analyses, for males and females. These distributions will not be presented since they can be derived from the data of Table I. The resulting chi-square values were as follows: 8.24 for fourth-graders and 5.56 for sixth-graders in condition IW, and 4.59 for fourth-graders and 4.12 for sixth-graders in condition WM. All χ^2 values are significant, indicating that among children displaying inconsistent choices the relative proportion of those choosing an immediate reward for Chocolate but a delayed reward for Crayons is consistently higher for girls than for boys.

Similar analyses were carried out to evaluate the interaction between sex and exchange value. Using only children displaying inconsistent choices in Money 1 and Money 3, a chi-square analysis comparing boys and girls yielded $\chi^2 = 10.59$ ($p < .01$) and 1.49 (n.s.), respectively, for fourth and sixth grades in condition IW. The respective values for the WM condition were 2.72 (n.s.) and 1.68 (n.s.). In all four groups the proportion of inconsistent children choosing an immediate reward for Money 1 but a delayed reward for Money 3 was higher for males than for females, but the difference was significant only for Condition IW in grade 4.

Turning now to the effects of condition, the finding of higher probability of delay in the IW than in the WM condition is probably not too surprising in view of the longer, temporal delay involved in the latter condition. Contrary to the prediction, however, the effects of appetitive value were not weaker in the WM condition than in the IW condition. This prediction was based on the assumption that incentives lose more of their appetitive value the farther away they are in time. The finding that appetitive value affects delay behavior in the WM condition as strongly as in the IW condition may be particularly revealing regarding the processes underlying this effect. These will be discussed below.

DISCUSSION

The results of the present study support the usefulness of the distinction between the exchange value and the appetitive appeal of a reward. In choices between a smaller earlier reward and a reward twice as large due at a later time, the probability of delaying was found to be directly related to the exchange value of the reward and inversely related to its appetitive appeal. This trend was consistently found for males and females in two age groups and for two types of conditions.

The exchange value of a reward may be readily operationally defined either in terms of cash equivalence or (when the rewards involved are of the same type) in terms of amount. This is not the case with appetitive appeal. In the present study the ranking of the rewards in terms of appetitive appeal was based on intuitive grounds. Therefore, strictly speaking, all that the results of the study suggest is that different types of rewards may reveal different delay-amount trade-off functions. A similar conclusion was suggested by the results of Logan and Spanier (1970) with rats, which indicated that the rewarding effect of food is more strongly reduced by delay than is that of water. Yet if the concept of appetitive appeal is to have any value in the study of delay behavior, it must be embedded in a theoretical framework from which additional indices of appetitiveness may be derived apart from those based on the rate at which a reward tends to decrease in attractiveness with delay.

Rapaport's (1951, 1960) discussion of the psychoanalytic theory of motivation contains what is perhaps the most explicit theoretical conceptualization of the concept of appetitive appeal. Motives are assumed to differ in terms of appetitiveness, the latter defined jointly in terms of four attributes: peremptoriness, cyclicity, selectiveness, and displaceability. Appetitive motives, as distinguished from voluntary behavior, are said to have a mandatory character and lower delayability, their peremptoriness tends to display a cyclic rise and fall, they tend to be directed toward specific objects that serve as the conditions for their discharge, and in the absence of such as object, substitute objects may trigger consummation.

A similar distinction among types of motives has been implied in early discussions of impulsiveness and impulse control (see Ainslie, 1975), based primarily on the quality of the experience of willing. The criterial feature is the effort experienced by the *will*. Ordinary willing is experienced as relatively effortless. This is in contrast to the effortful willing experienced when the *will* is pitted against a pressing impulse whose discharge is to be temporarily denied. This commonsense distinction, based essentially on a conflict conception of delay behavior, suggests an index of the appetitiveness of

a motive in terms of the effort required at the postdecisional stage to sustain its denial (or to abstain from its satisfaction). Mischel's work on the ability to wait for a reward when an alternative reward that is less preferred is immediately available is illustrative of this approach. Mischel's measure of the amount of waiting children were willing to endure in the presence of an immediate reward may serve as an index of the appetitive appeal of the reward.

In discussing his studies with the waiting paradigm, Mischel used a distinction that seems related to the one proposed here between exchange and appetitive value. Mischel and his colleagues (Mischel, 1974) found that exposure to an actual reward or instructions to ideate about its consummatory qualities decreased the ability to wait. On the other hand, exposure to pictures of the rewards or instructions to ideate about their nonconsummatory qualities enhanced the tendency to delay. He interpreted these findings in terms of the distinction between the arousal and the informational aspects of a reward, and proposed that attention to the arousal aspect (e.g., by focusing on consummatory qualities) reduces the tendency to wait, whereas attention to the informational aspect (e.g., by seeing a symbolic image of the reward—a reminder of the promised reward) enhances it. The arousal aspect of a reward is clearly related to its appetitive appeal, while the exchange value of a reward seems pertinent to its informational aspect. Mischel's studies, described above, may therefore be seen as suggesting devices for increasing the salience of either the exchange value or the appetitive value of a reward and thereby affecting delay behavior. The present study suggests that apart from the effects of attentional manipulations, different types of rewards may differ considerably in potential appetitive appeal (or arousal), and that these differences may be manifested already in the choice stage, not only in the postdecisional stage of resisting temptation studied by Mischel.

It is interesting to note that in Mischel's studies on waiting behavior the rewards employed are generally of high appetitive appeal (e.g., marshmallows). With these rewards, exposure was found to reduce waiting behavior. It would be interesting to see whether similar results would be obtained with rewards of lower appetitive value (e.g., a box of crayons). It is possible that with such rewards, exposure would enhance rather than reduce the tendency to delay. Such a result, if obtained, might account for Nisan's (1974) finding that subjects exposed to a box of crayons in a one-now versus two-later choice situation delayed gratification more than subjects not exposed to the rewards. The inconsistency between these results and those reported by Mischel was attributed by Nisan to the difference between choice behavior, which was investigated in his study, and resistance to

temptation, as studied by Mischel. But an alternative account of the differences is that Nisan used rewards with relatively low appetitive appeal. For those rewards, exposure might be assumed to affect primarily the salience of the informational aspect and therefore to lead to greater delay.

Contrary to our expectations, the effects of appetitive appeal were no stronger for the IW than for the WM condition. This result may throw some light on the process underlying the effects of appetitive appeal on delay behavior found in this study. In the framework of the psychoanalytic model-of-delay behavior, the appetitive appeal of the rewards offered may be conceived to affect delay probability by determining the peremptoriness of the impulsive urge for immediate discharge. However, on the basis of Rapaport's theorizing we would not expect that a reward expected in a week's time, even when of high appetitive value, would lead to the arousal of such "impulsive urge." An alternative conception is that the choice is essentially based on utility considerations, with appetitive appeal affecting the expected utilities of the alternative courses of action. These will incorporate the negative value of waiting and of abstention from immediate gratification (Mischel, 1974). If it could be assumed that abstention from an appetitive reward is more frustrating than abstention from a less appetitive reward, then the effects of appetitiveness may be accounted for in terms of the amount of frustration expected to ensue from delaying the reward.

This second conception, which may be seen to stand midway between the psychoanalytic and the value-expectancy model, is probably the best account of the results of the present study. It is not plausible to assume that the hypothetical-choice situations employed in the study were arousing enough to initiate the struggle postulated by psychoanalytic theory between impulse and reason. More likely the process as a whole was essentially a cognitive one, where appetitiveness entered only as a determinant of the amount of frustration expected to ensue from delay.

This conception of the effects of appetitive appeal suggests that if the exchange value of several rewards is controlled, then the differences among them in appetitive appeal may be gauged from the perceived psychological cost of being prevented from immediately obtaining them. In a pilot study, several children were asked to rate the degree to which they feel happy when they receive each of several rewards and the degree to which they feel sad when they are promised these rewards and then told that the promise will not be kept. The results suggest that more and less appetitive rewards (as intuitively defined) may indeed be distinguished on this basis: Depriving the individual of immediate consumption of the former is judged to be more frustrating. In terms of Klinger's (1975) conception of motivational behavior, merely suggesting to the individual that an appetitive reward may

be forthcoming induces a stronger psychological commitment toward satisfaction and more difficulty at disengagement from it than do offers in which the reward is less appetitive.

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