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## Forms of Expressing Economic Discontent

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### Economic Discontent and Politics

A population dissatisfied with the state of the economy, and putting the blame on the government, has a variety of possibilities for expressing its discontent. One may distinguish seven main forms:

1. Retreat from the *economy* and *polity*. The individuals concerned decide to become passive, or to use an apt German expression, to resort to *innere Emigration*. No clear indication is given to the government of what is causing the dissatisfaction, but the government experiences a general decline in support.
2. Exit to the *shadow economy*. In this form of expressing discontent with the government's performance, individuals switch from the official economy, in which the state functions by taxing, expending, and regulating, to the hidden economy defined by the absence of government intervention (see e.g., Frey and Weck 1984).
3. Expressing discontent as measured in *surveys* or opinion polls. There are two different types of such surveys: (a) questions on the level of *satisfaction* with the way the economy is handled by the government or with the politico-economic system as a whole (e.g., Inglehart 1986); and (b) questions referring to the *popularity* of the government or of specific parties. There is, by now, a very extensive literature on the connection between popularity and the state of the economy (see, e.g., Paldam 1981; Schneider and Frey 1988).
4. *Conventional political participation*. There are, again, two forms that may usefully be distinguished: (a) issue-related participation in direct referenda (see Schneider, Pommerehne, and Frey 1981); and (b) party-oriented participation in (general) elections (see, e.g., Monroe 1979; Rattinger 1980).
5. *Articulation through interest groups*. It has been one of the earliest

notions in the economic theory of politics (Public Choice) that interest group activity responds to the economic well-being of its members. In a modern society with a large government sector, interest groups step up their political activities when their members' relative income share decreases.

6. *Nonconventional participation.* There are many specific forms of such peaceful protest, ranging from demonstrations to politically motivated strikes.
7. *Use of force.* When economic conditions worsen, individuals may use violence to effect a change of the politicians in power or to bring about a change in the political system.

The many forms of expressing discontent have been duly observed by researchers but the interdependence between the various forms has been neglected, or has been treated in a superficial way. This has made it impossible to answer the following important questions: What form of expression is used to what intensity under what circumstances? To what extent is one form of expressing economic discontent substituted for another form? What forms of expression are typically used by the members of different social strata? What forms of expression are mainly employed in democracies, and what forms in authoritarian regimes?

The econometric studies of how economic discontent affects the polity have concentrated on one form of expression. This is clearly evidenced in the most advanced scientific endeavor in this area, popularity and election functions. No study seems to have taken into account the fact that government popularity and election support does not directly depend only on economic discontent but also on the extent to which discontent is expressed in other forms. The choice of the form of expression may be analyzed as the result of a rational calculus of individuals. There is an interdependence between various forms of expression depending on the costs and benefits connected with each form. Each form of expression depends, in general, on the other forms of expression, as well as on the underlying economic conditions. Disregarding this interdependence may result in a misspecification of the estimation equation. Testable propositions on the type and intensity of interactions between the forms of expression may be derived.

### **The Choice of Expression**

Rational decision makers choose that form of expressing economic discontent from which they expect to derive the highest expected (marginal) benefits and/or which is accompanied by the least expected (marginal) cost. The

utility of using a particular form of expression (or political activity) consists of gaining either a private good or a public good.

Private goods may be an increase in monetary income or in psychic income such as prestige and publicity, both with respect to the population as a whole or to a reference group. In many forms of expression, such as replying to surveys or participating in elections and demonstrations, no monetary income can be gained. This potential exists, however, when force is used, such as when terrorists or guerillas raid banks or take hostages for ransom. Psychic income may be gained through several forms of expression, such as in voting (the benefit consists of a good civic conscience) or in demonstrations that yield high private benefits in terms of social acceptance among the other demonstrators (see, e.g., Muller and Opp 1986), or in terms of publicity. Public goods, on the other hand, consist of improvements of general economic conditions. Here again, the various forms of expression have a different capacity to lead to such improvement.

There are three cost components connected with the various forms of expression: (a) The *monetary* cost. In several forms of expression it is zero, such as in surveys and voting, but it is often positive in nonconventional forms of political activity such as participating in demonstrations. (b) The *time* cost. Some forms of expressing discontent use very little time, such as answering surveys or participating in elections, while others involve heavy time costs, such as participating in strikes or engaging in a professional terrorist activity. (c) The *expected punishment*. This is a function of the expected size of punishment and the expected probability of being caught in a form of expression subject to punishment. The cost of punishment takes the form of time cost in the case of imprisonment, and of money cost in the case of fines. For simplicity, and without loss of generality, they are subsumed here under monetary cost.

More formally: individuals are supposed to use those forms of expression and to that extent that maximize their individual utility subject to the various constraints they are faced with. Individual utility ( $U$ ) is higher, the more private market goods  $X_j$  ( $j = 1, 2, \dots, m$ ) are consumed, the higher is the free time or leisure  $F$ , the more private goods gained by participating in political activities ( $G_k$ ,  $k = 1, 2, \dots, l$ ), and the more of the public good  $E$  (the state of the economy) is achieved by expressing discontent:

$$U = U(X_1, X_2, \dots, X_m; F; G_1, G_2, \dots, G_l, E); \quad (1)$$

with all partial derivatives

$$U' > 0, U'' < 0.$$

This maximand is subject to two kinds of constraints:

*a. Production functions.* The private goods,  $G_k$ , may be "produced" by the various forms of expression (or intensity of political activities  $A_i$ ,  $i = 1, 2, \dots, n$ ):

$$G_k = G_k(A_1, A_2, \dots, A_n); \quad (2)$$

where  $k = 1, 2, \dots, l$  and with  $G_{ki} \equiv \partial G_k / \partial A_i \geq 0$ ;

$$G_{kii} = \partial G_{ki} / \partial A_i \leq 0.$$

The state of the economy,  $E$ , may also be influenced by the forms of expressing discontent

$$E = E(A_1, A_2, \dots, A_n; Z); \quad (3)$$

with  $E_i \equiv \partial E / \partial A_i \geq 0$ ; and

$$E_{ii} \equiv \partial E_i / \partial A_i \leq 0.$$

$Z$  stands for the exogenous influences on the state of the economy unrelated to the pressure exerted by individuals through their political activities  $A_i$ .

Finally, income  $Y$  is produced by the input of labor time,  $L$ , payed at wage rate  $w$ :

$$Y = wL. \quad (4)$$

*b. Resource constraints.* The individuals are limited in their activity by the income available to them and used for the purchase of market goods  $X_j$  at price  $p_j$ , and the expenditure on the various forms of expression  $A_i$  at price  $p_i$ :

$$Y = \sum_{j=1}^m p_j X_j + \sum_{i=1}^n p_i A_i. \quad (5)$$

Time also limits activities. Total available time,  $T$ , is used for working in the market  $L$ , for leisure  $F$ , or for political activities  $P$ :

$$T = L + F + P \quad (6)$$

The time used for political activities equals the various forms of expression multiplied by their time intensity  $t_i$ :

$$P = \sum_{i=1}^n t_i A_i. \quad (7)$$

Combining equations 4-7 yields the full income constraint:

$$wT = \sum_j p_j X_j + wF + \sum_i (p_i + t_i w) A_i, \quad (8)$$

where  $t_i w$  is the time spent in political activities evaluated at its opportunity cost,  $w$ .

Maximizing equation 1 subject to equations 2, 3, and 8 yields the following first-order condition for the relative use of the different forms of expression  $A_q$  and  $A_r$ :

$$\frac{\sum_k \left( \frac{\partial U}{\partial G_k} \cdot \frac{\partial G_k}{\partial A_q} \right) + \frac{\partial U}{\partial E} \cdot \frac{\partial E}{\partial A_q}}{\sum_k \left( \frac{\partial U}{\partial G_k} \cdot \frac{\partial G_k}{\partial A_r} \right) + \frac{\partial U}{\partial E} \cdot \frac{\partial E}{\partial A_r}} = \frac{p_q + t_q w}{p_r + t_r w},$$

or

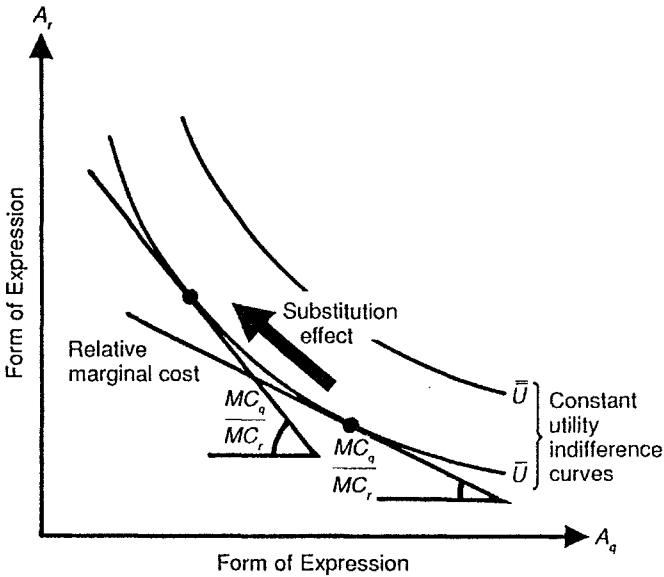
$$\frac{MU_q}{MU_r} = \frac{MC_q}{MC_r} \quad (9)$$

The left-hand side expresses the marginal utilities gained in the form of private goods and the public good (state of the economy)  $MU_q/MU_r$ ; the right-hand side indicates the marginal monetary and time costs of engaging in the activities  $MC_q/MC_r$ . As shown in figure 1 (where the utility level  $U$  is kept constant), a relative increase in the cost of activity  $q$  ( $MC_q/MC_r$  rises) causes individuals to choose relatively less costly forms of expression ( $A_q/A_r$  falls). For a given utility level ( $U = \text{constant}$ ) equation 9 establishes a relationship between the various forms of expressing discontent for which

$$\frac{MU_q}{MU_r} = \frac{MC_q}{MC_r} = - \frac{dA_r}{dA_q} \quad (10)$$

holds. Equation 10 determines the marginal relationships between the forms of political activity in the optimal position.

A higher level of utility (say  $\bar{U} > \bar{U}$  in fig. 1) is associated with more private goods and/or a more favorable state of the economy (keeping the market goods and leisure constant):



**Fig. 1.** When the relative cost of activity  $A_q$  rises, individuals substitute less costly activities.

$$U = U(G_1, G_2, \dots, G_p, E) = f(A_1, A_2, \dots, A_n). \tag{11}$$

Rearranging leads to:

$$A_1 = \Omega_1 (A_2, \dots, A_n; G_1, G_2, \dots, G_p, E). \tag{12}$$

The use of the form of expressing discontent  $A_1$  depends on the intensity with which the other political activities are used, and on the level of private goods and on the public good state of the economy. Functions corresponding to equation 12 can be written for all  $A_i, i = 1, 2, \dots, n$ . These expression functions form the basis for formulating theoretical hypotheses and econometric tests.

**Comparative Analysis of the Forms of Expression**

The exogenous changes in benefits and costs leading to systematic changes in the behavior of individuals with respect to how the forms of expressing discontent are chosen may reflect various factors: (1) the impact of differences between individuals, and (2) the impact of institutional differences.

### Differences between Individuals

The formal model is useful for deriving testable propositions about which forms of expression are chosen by individuals living in varied circumstances. For the purpose of illustration, two types of individuals are distinguished, "young idealists" and "members of the middle class." The differences between these two groups of people are now applied to equation 9 describing the rational (utility maximizing) use of political activities.

Considering first the marginal utilities, it makes sense to assume that the young idealists are less interested than the middle class in the benefits from both private goods as well as the public good "general economic condition" ( $\partial U/\partial G_k$  and  $\partial U/\partial E$  are smaller). They are also likely to expect a smaller impact on the state of the economy from surveys and elections ( $\partial E/\partial A_1$  and  $\partial E/\partial A_2$  are smaller). Rather, they expect that policies can be changed only by unconventional and violent forms of expression ( $\partial E/\partial A_3$  and  $\partial E/\partial A_4$  are larger).

On the cost side, a major difference exists with respect to the cost of time: the young idealists have considerably lower opportunity costs than the middle class ( $w$  is lower) so that they are prone to use the more time-intensive political activities, i.e., demonstrations and internal war.

Considering both (marginal) costs and benefits the following testable propositions may be derived: (a) young idealists tend to engage in unconventional political participation (demonstrations, violence); and (b) the middle class shuns the time-intensive forms of participation and tends to engage in conventional forms, especially those with psychic rewards (voting in a social setting where this form of participation is considered a civic duty). These (and other) theoretical propositions may be empirically tested provided individual data are available.

### Differences between Political Systems

This section develops theoretical propositions about the forms of expressing discontent with the government that tend to be used in democratic ( $d$ ) and authoritarian ( $a$ ) systems. The differences between the two political systems are reflected in the marginal cost and marginal benefits of equations 9 and 10, which specify an individual's optimal state. The differences in marginal benefits relate to the public good (i.e., the state of the economy) only. For the purpose of deriving comparative theoretical propositions, equation 12, describing the intensity with which a particular form of expression is used, may be simplified to

$$A_1 = \phi_1 (A_2, \dots, A_n, E), \quad (13)$$

and analogously for the other types of political activity.



For the purpose of this analysis it is useful to group the forms of expression  $A_r$  into three basic forms.

1. Surveys as expressing satisfaction or dissatisfaction with the government concerning the state of the economy. In a democracy, this form of expression causes practically no (marginal) cost, not even in terms of time ( $MC_s^d = 0$ ). In an authoritarian political system, on the other hand, this form of expressing dissatisfaction about the way the government deals with the economy may be quite costly, because the individual concerned may be easily identified and punished for opposing the government. Hence,  $MC_s^a > 0$ .
2. "Official" participation  $A_o$  in the form of elections and manifestations organized by, or on behalf of, the government. In a democracy, the cost of this form of expression consists in the time used ( $MC_o^d > 0$ ). In an authoritarian system, the individuals run a (marginal) cost if they do not participate in this form of expression. The government monitors who is active in its support in these officially organized political activities, hence  $MC_o^a < 0$ .
3. Unconventional forms of expression  $A_u$  in the form of violent demonstrations and internal war. Such political activities are punished in both a democratic and an authoritarian system, and they require time, hence  $MC_u^d, MC_u^a > 0$ .

On the basis of these empirical observations about the differential marginal cost of the three forms of political expression between democratic and authoritarian systems, testable theoretical propositions about the relationships between the forms of expression can be derived. In particular, the (first) partial derivatives ( $\partial A_q / \partial A_r \equiv \phi_{qr}; q, r = s, o, u, q \neq r$ ) in the expression functions

$$A_s = \phi_s(A_o, A_u, E);$$

$$A_o = \phi_o(A_s, A_u, E); \quad (14)$$

$$A_u = \phi_u(A_s, A_o, E)$$

are derived. As an example, consider an individual who minimizes the cost of achieving a given utility level  $U$  by using the optimal forms of expression  $A_q$  and  $A_r$  (see fig. 1). The slope of this cost or budget constraint is given by the relative marginal costs  $MC_r/MC_q$ , which are fixed within a political system, but differ across political systems. To remain in an optimal state, an individual reacts to marginal changes in the use of a form of expression and thereby to

|                | Surveys<br><i>s</i>                         | Official<br><i>o</i>                             | Unconventional<br><i>u</i>                    |
|----------------|---|--|---|
| Surveys        |   | $d$<br>$0$<br>$\sigma_{os}$<br>$\geq 0$<br>$a$   | $d$<br>$0$<br>$\sigma_{us}$<br>$< 0$<br>$a$   |
| Official       | $d$<br>$0$<br>$\sigma_{so}$<br>$> 0$<br>$a$ |  | $d$<br>$< 0$<br>$\sigma_{uo}$<br>$> 0$<br>$a$ |
| Unconventional | $d$<br>$0$<br>$\sigma_{su}$<br>$< 0$<br>$a$ | $d$<br>$< 0$<br>$\sigma_{ou}$<br>$\geq 0$<br>$a$ |   |

Fig. 2. The relationship between forms of political expression in democratic and authoritarian systems. The cells exhibit the marginal derivatives ( $\partial A_q / \partial A_r = \phi_{qr}$ ,  $q, r = s, o, u$ ,  $q \neq r$ ). The upper left-hand part of each cell indicates the value of the partial derivative in a democratic system ( $d$ ), the lower right-hand part in an authoritarian system ( $a$ ).

changes in total cost by appropriately adjusting the other forms of political expression in order to reestablish the previous cost level.

*Surveys.* Consider the increased use of surveys to express dissatisfaction with the state of the economy in a democracy due to an exogenous influence, say greater opportunities to do so. The marginal cost of engaging in this form of political activity being (practically) zero ( $MC_s^d = 0$ ), the individual remains in his or her optimal state and there is no incentive to adjust the other forms of expression:

$$(\partial A_o / \partial A_s)^d = (\partial A_u / \partial A_s)^d = 0. \quad (15)$$

Conversely, if one of the other forms of expression ( $A_o$  or  $A_u$ ) is changed, no compensation of the disequilibrium is possible by surveys, hence:

$$(\partial A_s / \partial A_o)^d = (\partial A_s / \partial A_u)^d = 0. \quad (16)$$

These results are shown in figure 2.

In an authoritarian political system, on the other hand, it is costly for an individual to express his or her opinion in a survey, because he or she risks

punishment ( $MC_s^a > 0$ ). An increased use of surveys for expressing dissatisfaction drives up total cost, resulting in a suboptimal state. The individual concerned can only reach his or her preferred (optimal) position again by reducing cost. This can be achieved by either increasing  $A_o$  (as  $MC_o^a < 0$ ) or by reducing  $A_u$  (as  $MC_u^a > 0$ ). If risk of punishment by the government were the only relevant cost factor, this would mean that a greater exposure to risk by expressing one's dissatisfaction more freely in surveys must be compensated by supporting the government more strongly in official manifestations, or by reducing one's engagement in unconventional forms of expression, e.g., by participating less in (violent) antigovernment demonstrations. Thus, the partial derivatives are:

$$(\partial A_o / \partial A_s)^a \geq 0; (\partial A_u / \partial A_s)^a < 0. \quad (17)$$

The equality sign for  $\phi_{os}^a$  applies for the case in which the official form of participation is already at its maximum (e.g., the party in power is supported by 100 percent of the electorate). The derivatives (17) are again exhibited in figure 2.

*Official Participation.* Consider now an exogenous increase in official participation. In a democracy, there is some cost attached in the form of time and effort to be expended ( $MC_o^d > 0$ ). An increase in this form of expression raises costs that can be compensated by a decrease in unconventional political participation:

$$(\partial A_u / \partial A_o)^d < 0. \quad (18)$$

In an authoritarian system, an individual who engages more strongly in officially sanctioned and prescribed forms of participation experiences a decrease in cost ( $MC_o^a < 0$ ). He or she can therefore allow him- or herself to express dissatisfaction with the state of the economy by doing so more strongly in surveys or unconventional forms of participation:

$$(\partial A_s / \partial A_o)^a > 0; (\partial A_u / \partial A_o)^a > 0. \quad (19)$$

These results are again shown in figure 2.

*Unconventional Participation.* Engaging in unconventional political participation entails costs in the form of monetary resources, time, and risk of punishment in both democratic and authoritarian systems ( $MC_u^d, MC_u^a > 0$ ). An increased engagement pushes up total costs that can be compensated by lowering official participation in a democracy (as  $MC_o^d > 0$ ) and increasing it in an authoritarian system (as  $MC_o^a < 0$ ):

$$(\partial A_o / \partial A_u)^d < 0; \quad (20)$$

$$(\partial A_o / \partial A_u)^a \geq 0. \quad (21)$$

The equality sign of  $\phi_{ou}^a$  is relevant when official participation is already at its maximum.

In an authoritarian system, the rising costs of engaging in unconventional forms of political participation can also be compensated by reducing expression in the form of surveys (as  $MC_s^a > 0$ ):

$$(\partial A_s / \partial A_u)^a < 0. \quad (22)$$

These results are again shown in figure 2.

*Overall Pattern.* The theoretically derived relationships between forms of expression yield the following overall pattern:

- There is neutrality between surveys and all other forms of expression in a democracy;
- There is a substitutive relationship between surveys and unconventional political participation in an authoritarian system, and between official and unconventional forms of participation in a democracy; and
- There is a complementarity between surveys and official participation, and official and unconventional participation in an authoritarian political system.

*Effect of the State of the Economy.* I now turn to the differential way in which the three forms of expression  $A_s$ ,  $A_o$ , and  $A_u$  are used by individuals in order to express their discontent with the state of the economy. This determines the partial derivative  $\partial A_q / \partial E$ ,  $q = s, o, u$ , in equation 14.

In an optimal state, the individual equates relative marginal utilities to relative marginal costs. Taking the effect of the forms of expression on private goods to be equal across political regimes, according to equation 9 the relative marginal utilities are:

$$MU_q / MU_r = (\partial E / \partial A_q) / (\partial E / \partial A_r). \quad (23)$$

Given relative marginal costs, the political activity  $A_q$  is used more intensively relative to  $A_r$ , the higher the (expected) effect of  $A_q$  on the improvement of the state of the economy ( $\partial E / \partial A_q$ ), in comparison to the effect of the other activity ( $\partial E / \partial A_r$ ).

In a democracy, the citizens can expect that survey results have an effect on the government's handling of the economy ( $\partial E / \partial A_s^d > 0$ ), though the effect may be small. This effect has been established in the context of politico-economic models where the government takes popularity surveys as a current indicator of (expected) election outcomes. In the case of a popularity deficit, the government uses its policy instruments in order to improve economic conditions (see, e.g., Frey 1978). Accordingly, individuals in a democracy react to a worsening of economic conditions by expressing themselves in surveys:  $(\partial A_s / \partial E)^d > 0$ .

In a democratic setting, the citizens expect the greatest impact on the government's actions, and thereby on the economy, by using the "official" forms of expression, i.e., voting in elections and in referenda:  $(\partial E / \partial A_o)^d > 0$ . Hence, a worsening of the state of the economy leads to a reaction in official participation:  $(\partial A_o / \partial E)^d > 0$ . Finally, unconventional forms of participation may have some effect on the government's management of the economy,  $(\partial E / \partial A_u)^d > 0$ , but the effect may be expected to be rather small in the case of violent forms because of its illegitimacy. Consequently, the marginal utility of engaging in this form of political activity is rather small, but positive and hence  $(\partial A_u / \partial E)^d > 0$ .

Figure 3 presents the signs and approximate magnitudes of the reactions to changes in the state of the economy to be expected in a democracy.

In an authoritarian political system individuals cannot expect any significant impact from expressing their opinions in surveys:  $(\partial E / \partial A_s)^a \approx 0$ . Hence, their (expected) marginal utility of employing this form of expression is very small, and they are little inclined to engage in it when dissatisfied with the state of the economy:  $(\partial A_s / \partial E)^a \approx 0$ . The official forms of participation, elections and manifestations being employed by the government purely for its own purposes, cannot be expected to affect an authoritarian system:  $(\partial E / \partial A_o)^a = 0$ . Accordingly, no marginal benefit of using this form of expression exists, and individuals do not show any reaction to changes in economic conditions:  $(\partial A_o / \partial E)^a = 0$ . In a nondemocratic political setting, the only form of reaction that can be expected to influence the government's actions to any significant degree is that of unconventional political participation:  $(\partial E / \partial A_u)^a > 0$ . A worsening of economic conditions may therefore (ceteris paribus, i.e., under unchanged marginal cost) lead to increased unconventional political participation in the form of protest, violent demonstrations, or even guerrilla warfare:  $(\partial A_u / \partial E)^a > 0$ .

The theoretically expected forms of reacting to changing economic conditions are also exhibited in figure 3. It also shows that there are significant differences in expected reactions of individuals between democratic and authoritarian political systems.

| Political Systems |                          |                        |
|-------------------|--------------------------|------------------------|
|                   | Democratic               | Authoritarian          |
| Surveys           | > 0<br>(small to medium) | ≈ 0<br>(small to zero) |
| Official          | > 0<br>(large)           | = 0                    |
| Unconventional    | > 0<br>(small)           | > 0<br>(medium)        |

Fig. 3. How individuals react to changes in the state of the economy in democratic and in authoritarian political systems ( $\partial A_q / \partial E$ ,  $q = s, o, u$ )

### Concluding Remarks

I have argued that there are good theoretical (and empirical) reasons to assume that the various forms of expressing discontent about the state of the economy are (at least partly) interdependent. There are both substitutive and complementary relationships between types of political activity, and there are significant differences according to whether individuals are acting in a democratic or authoritarian political system. These results suggest that existing econometric (politometric) estimates of expression functions, in particular popularity and election functions, may be seriously misspecified. In future works, the theoretically derived interdependence between the various forms of expressing satisfaction should explicitly be taken into account.

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