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The Impact of Realistic and Illusory Control on
Psychological Distress: A Test of the Model of Instrumental
Realism

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Abstract:

This paper explores the relationship between sense of control and psychological distress. Rather than providing evidence for the view that rejection of responsibility for outcomes has a beneficial effect on the mental health of low status groups, our findings suggest that increments of control have their most dramatic effect among those with low status and resources. The results reported are consistent with the existence of a threshold of dysfunction beyond which point increased feelings of control are detrimental to one's well-being. Unlike previous research though this threshold effect was found to apply to both realistic and illusory control.

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*Control and Psychological Distress:
Theoretical Perspectives*

Efforts to explain social patterns of psychological distress have consistently focused on sense of control as a potentially crucial link. However, a variety of theoretical approaches have predicted radically different outcomes. In a review of such approaches, Mirowsky and Ross (1990) identify three influential perspectives.

- (i) the consolation prize theory of alienation;
- (ii) illusory control as false consciousness;
- (iii) the threshold of dysfunction.

An evaluation of these approaches leads them to suggest an alternative to the unified model of instrumental realism.

The consolation prize theory of alienation suggests that the impact of feelings on emotional well-being depends on the nature of the preponderant outcomes in one's life. Claiming responsibilities for good outcomes enhances esteem, while accepting responsibility for negative outcomes damages self-esteem. Thus for low-status people, rejecting the role of chance, effort and ability as determinants of life outcomes reduces distress (Hyman, 1986). Despite the intuitive appeal of the theory, as Mirowsky and Ross (1990: 1505) note, this empirical evidence offers little in the way of support for the hypothesis (Klugel and Smith, 1986; Wheaton, 1985).

The "illusory control" as false consciousness

perspective, on the other hand, suggests that a greater sense of control has positive mental health effects irrespective of social status, resources or objective opportunities. This approach is rooted in attempts to explain the legitimation of the status quo by those who lose out in the contest. The acceptance of personal responsibility for one's economic faith provides an ideological justification for the unequal distribution of rewards. Sociological interpretations of such beliefs in terms of false consciousness have parallels. Mirowsky and Ross note (1990: 1512) in notions of "marginal control" in anthropology and in the concept of defence mechanisms in psychology. A variety of studies provide evidence which is consistent with this perspective. Thus studies consistently find that socio-economic status increases sense of control and, even when we take status into account, those who experience a greater sense of control are less distressed (Pearlin, *et al.*, 1981; Mirowsky and Ross, 1989; Ross and Mirowsky, 1989; Wheaton, 1980).

The major difficulty associated with the view that illusory control sustains emotional well-being is the idea that there is no limit to the comfort of self-delusion.

Reality is the only obstruction to the path of perfect bliss. Some consider illusory control as a social problem - an ideological narcotic with insidious social consequences. Others consider it a personal cure - an antidote to existential terms of life. Whichever view is taken it is reasonable to question whether the "dose-response" relationship is linear. As with a drug there may be diminishing incremental effects of larger and larger "doses" of illusory control. There may even be a threshold beyond which increasing doses are more damaging than soothing. (Mirowsky and Ross, 1990: 1515).

The threshold of dysfunction perspective directs attention to the inherent tension between the need for realistic appraisal and the need for psychological defence. The emotional benefits of a sense of control are perceived to be largely a consequence of effective active. Psychological distress is minimised by a sense of control that provides an effective balance of motivation and realism.

A number of studies provide support for the hypothesis of the existence of such a threshold. Wheaton's (1985) results describe a fixed threshold of dysfunction which implies, as Mirowsky and Ross (1990: 1518) observe that people with low status benefit up to level of the threshold. This implication, however they note seems to run counter to the basic reasoning behind the model which emphasises the constraints of realism. The unified model of instrumental realism takes as its starting point the assumption that if the marginal benefits of increased motivation are cancelled out by the consequences of unrealistic self-assessment, the threshold should increase with status. Realistic control should decrease without a threshold dysfunction. The threshold should refer to illusory control only.

In what follows we make use of the data from the Survey of Poverty, Income Distribution carried out by The Economic and Social Research Institute in 1987 in order to assess the relative merits of these approaches.

Data and Variables

The survey was designed to provide a representative

national sample of all households. Interviews were conducted with all available adults in 3,294 households. Post-sample correction, through reweighting of results to take into account inter and intra household non-response, was employed. More detailed discussions of the sampling procedures can be found in Callan, *et al.*, 1989, and Whelan, *et al.*, 1991.

Psychological Distress

Psychological well-being was measured using the 12 items version of the General Health Questionnaire and the GHQ scoring procedure (Goldberg, 1972, 1977). In order to make it possible for the GHQ to be administered by interviewers, it was necessary to introduce some changes to the combinations of items and answer formats. The procedure adopted was intended to avoid grouping of "positive" or "negative" items or the need for repeated changes of response format. The approach taken was to divide the items into two groups of 6, each of which was allocated to one of the two possible response formats. The alpha coefficient for the 12-item scale was found to be .82. The split half correlation coefficient between the sub-scales using changed and unchanged response formats was .73.

Control

In measuring control we have employed a set of items which have been fairly widely employed in the literature (Pearlin, *et al.*, 1981). The statements to which respondents reacted were as follows:

- (i) I can do just about anything I set my mind to.
- (ii) I have little control over the things that happen to me.
- (iii) What matters in the future depends on me.
- (iv) I often feel helpless in dealing with the problems of life.
- (v) Sometimes I feel I am being pushed around in life.
- (vi) There is really no way that I can solve some of the problems that I have.

The response format ranged from "Strongly agree" to "Strongly disagree". The alpha reliability coefficient is .68. The items are scored so that a high score indicates strong feeling of control or low score strong feelings of fatalism. The scores were averaged and the variable thus a potential range of scores going from "1" to "4".

Attribution of Responsibility for Poverty

Respondents were asked to indicate the extent of their agreement or disagreement with the following statements:

When people are poor it is usually their own fault.

By and large the reason people are poor is that society does not give them a chance.

Lack of ambition is the root cause of poverty.

Only by completely changing the way the country is run can we hope to reduce the number of people in poverty.

The items were scored so that responses emphasising structural explanations are scored "1" and those attributing

poverty to personal limitations are scored "0"; we thus get a scale reflecting structural versus personal attributions of poverty ranging from 0 to 4.

Education

We distinguish between those

- (i) with primary education or less
- (ii) incomplete secondary education
- (iii) Leaving Certificate
- (iv) Third Level education.

Social Class

The class schema we have employed is the Irish Census Board Social Class Scale (O'Hare, Whelan and Commins, 1991) with the modification that we have allocated married women living with their spouses to class categories. Class is scored from "1" for unskilled manual workers to "6" for higher professional and managerial respondents on the basis of their spouse's occupation.

Physical Health Status

Respondents were asked if they "had any major illness, physical disability or infirmity that has troubled you for at least the past year or that is likely to go on troubling you.

Unemployment

The concept of unemployment adopted in this study, like that in the Census and Labour Force Survey is dependent upon the respondent's evaluation of their own employment status.

Life-Style Deprivation

The life-style measures of resources we employ are based on the enforced absence of a range of life-style items. The choice of items to be included in the study was influenced by the range of indicators employed in other major studies of poverty. Mack and Lansley's (1985) items were chosen so as to exclude things which almost everyone has or very few people would miss. The 24 items on which our analysis is based are made up of 17 of the Mack and Lansley pool of items together with 7 additional items.

For each of 20 of the life-style items the head of the households or household manager was asked.

- (i) Whether the household had the item in question.
- (ii) If not, whether they would like to have it but must do without it due to lack of money.
- (iii) Whether they felt the item was a necessity, i.e., "Is something that every household (or person) should be able to have and that nobody should have to do without"?

In addition to the 20 items employing this format, the following set of items were included in the index, bringing the total number of items to 24:

- (i) Whether there was a day during the previous two weeks when the household manager did not have a substantial meal at all - from getting up to going to bed.

- (ii) Whether the household manager has had to go without heating during the last year through lack of money, i.e., having to go without a fire on a cold day, or go to bed early to keep warm or light the fire late because of lack of coal/fuel.
- (iii) Head of household has not had an afternoon or evening out in the last fortnight that costs money, because of lack of resources.
- (iv) (a) Household is currently in arrears on rent, mortgage, electricity and gas, or
 - (b) has had to go into debt in the last 12 months to meet ordinary living expenses such as rent, food, Christmas or lack of school expenses, or
 - (c) has had to sell or pawn anything worth #50 or more to meet ordinary living expenses.

In our subsequent analysis we distinguish two dimensions of life-style deprivation. The first dimension which we label *primary life-style deprivation* involves the enforced absence of socially defined necessities such as new clothes, two pairs of shoes, a warm overcoat, a roast or its equivalent once a week, a meal with meat, chicken or fish every second day; or living in a household which is experiencing severe debt problems or in which the household manager is experiencing extreme food or heat deprivation. *Secondary deprivation* involves the enforced absence of a daily newspaper, a hobby, central heating, car, telephone, annual holidays or being unable to save or afford an afternoon or

even out in the previous two weeks.

RESULTS

The Consolation Prize Theory of Alienation

This theory, as Mirowsky and Ross (1990: 1508-09) observe, can be represented in the following two equations:

$$C = a_0 + a_1S + U_c \quad (1)$$

and

$$D = (b_0 + b_1S) + (b_2 + b_3S)C + U_d \quad (2)$$

where S represents socio-economic status and resources, C is the individual's sense of control, D is psychological distress and U_c and U_d are residuals.

In Table 1 we provide tests of this hypothesis making use of our measures of social class and primary life-style deprivation. In both cases there is a significant interaction between sense of control and resources but the coefficients for the interaction terms have signs in the opposite direction to that suggested by the theory. The impact of control on psychological distress increases as one descends the class hierarchy and increases as primary life-style deprivation becomes more extreme.

The foregoing results are consistent with the threshold of dysfunction hypothesis. A direct test is reported in what follows.

Table 1: *Multiple Regression Showing the Impact of Sense of Control and Social Class/Primary Deprivation on Psychological Distress*

	(i) b	(ii) b
Control	-3.04***	-1.45***
Social Class	-0.98***	
Control x Social Class	.34***	
Primary Deprivation		1.18***
Control x Primary Deprivation		-0.34***
Intercept	9.26	4.67
R ²	.195	.245
p	<.001	<.001
N	6,111	6,111

*** p < .001

The Threshold of Dysfunction

The idea that there is a threshold below which increments of control are effective in reducing emotional distress and above which they are ineffective is represented in the following equations.

$$D = b_0 - b_1 C + b_2 C^2 + U_d, \quad (3)$$

$$C \text{ optimum} = b_1 / 2b_2 \quad (4)$$

Equation (3) says that there is a parabolic relationship between psychological distress and sense of control. Equation (4) defines the sense of control at which the slope of the parabola is zero. The theoretical expectation is that $b_1 > 0$ and $b_2 < 0$.

In Table 2 we present the results of testing this hypothesis on our data set. Our results agree with those of Wheaton (1985) and indicate an optimum value of control at a score 3.84. 94.6 per cent of our respondents fall below this threshold. Beyond this score the impact of increases in control is to increase rather than decrease psychological distress. Such an outcome, as Mirowsky and Ross (1990, p. 1517) point out, clearly contradicts the consolation prize theory of alienation. In fact, since sense of control increases with status, it suggests that those who have the lowest level of control will benefit most from an increment.

Illusory and Realistic Control

The foregoing analysis assumes, following Wheaton (1985), that there is one threshold of dysfunction. Mirowsky

Table 2: Multiple Regression Testing the Threshold of Dysfunction Hypothesis

	<i>b</i>
Control	-9.78
Control ²	1.47
Intercept	16.4
R ²	.228
P	<.001
N	6.111

p < .001

and Ross' (1990) theoretical discussion suggests that the threshold effect will operate for illusory control only and that consequently there will exist a variety of thresholds conditional on status and resources. In order to test this hypothesis, it is necessary first to operationalise realistic and illusory control.

We have taken advantage of the range of information available in the Poverty Survey to achieve a measure of realistic control which is likely to be more precise than any employed in the literature heretofore. From Table 3 we can see that social class, life-deprivation, education and physical health status are significantly related to feelings of control. In addition, women and older respondents are likely to be more fatalistic. A variety of factors interact with gender. Thus unemployment reduces sense of control primarily for men. Similarly, being separated or divorced has a particularly negative impact for women. The full set of resource and resource-related variables explains 49 per cent of the variance in feelings of control. The predicted value of control \hat{C} arising from this equation becomes our measure of realistic control while the difference between actual control and predicted control is $(C - \hat{C})$ serves as our measure of illusory control.

The model of instrumental realism is represented in the following equation

$$\hat{D} = b_0 - b_1\hat{C} - b_2(C - \hat{C}) + b_3(C - \hat{C})^2 + U_d \quad (5)$$

Table 3: *Multiple Regression of Determinants of Feeling of Control*

	<i>b</i>
Social Class	.017***
Primary Deprivation	-.055***
Secondary Deprivation	-.045***
Physical Health Status	-.197***
Primary Education or less	-.102***
Some Secondary Education	-.102***
Leaving Certificate	-.077***
Unemployment	-.024
Unemployment x Gender	-.090**
Gender	.07***
Income	.007***
Age	-.004***
Separated/Divorced	-.076*
Separated/Divorced x Sex	.702
Unable to Work due to Permanent Illness/Disability	-.078**
Intercept	2.868
R ²	.229
p	<.001
N	6,111

*** p < .001

** p < .01

* p < .1

and

$$(C - \hat{C}) \text{ optimum} = b_2/2b_3 \quad (6)$$

In Mirowsky and Ross' terms

$$\begin{aligned} \text{Power} &= \hat{C} \\ \text{Realism} &= (C - \hat{C})^2 \\ \text{Optimism} &= (C - \hat{C}) \end{aligned}$$

Equation (i) in Table 4 indicates that the optimum deviation from the expected sense of control is .725; 97.6 per cent of our respondents fall below this threshold. The optimum level of control

$$C \text{ optimum} = \hat{C} + .725.$$

This prediction derived from the model of instrumental realism assumes that the threshold of dysfunction effect applies to illusory but not realistic control. However, as is clear from Equation (ii) in Table 4, the squared term for realistic control is also highly significant, thus

$$\begin{aligned} \hat{D} &= b_0 - b_1\hat{C} - b_2(C - \hat{C}) + b_3(C - \hat{C})^2 + b_4 C^2 \\ (C - \hat{C}) \text{ optimum} &= \frac{b_2}{b_3} = .73 \end{aligned}$$

97.7 per cent of our respondents fall below this threshold.

$$\hat{C} \text{ optimum} = \frac{b_2}{2b_4} = 2.79$$

93.5 per cent of respondents fall below this threshold.

Table 4: *Psychological Distress Regressed on Realistic and Illusory Control*

	(i)	(ii)
C	-3.35***	-28.54***
$(C - \hat{C})$	-1.64***	-1.63***
$(C - \hat{C})^2$	1.13***	1.12***
\hat{C}^2		4.81***
Intercept	9.75	42.57
R ²	.228	.243
P	< .001	< .001
N	6,111	6,111

p < .001

Thus, for respondents with realistic control scores which do not exceed 2.97, the optimum level of control, as the unified model of instrumental realism suggests, is equal to realistic control plus a constant

$$C \text{ optimum} = \hat{C} + .73$$

However, when realistic control goes beyond a score of 2.97 increments in control became counter productive.

Conclusions

The results we have reported clearly provide support for Mirowsky and Ross' (1990) rejection of the consolation prize theory of alienation. Rather than supporting the view that rejection of responsibility for outcomes has a beneficial effect on the mental health of low status groups, our findings suggest that increments of control have their most dramatic effect among those with low status and limited resources.

Our analysis also provides support for the notion of a threshold of dysfunction beyond which point increased feelings of control are actually detrimental to one's emotional well-being. Finally, for the vast majority of our respondents, Mirowsky and Ross' conclusion that the optimum level of control is a function of realistic control plus a constant, which takes into account the optimum deviation from realistic control, holds. Our results depart from theirs, though, in that realistic control is also found to display a threshold of dysfunction.

We have explored the possibility that unusually high feelings of control are achieved at the expense of supportive social relationships but we can find no evidence to support this hypothesis. One possibility which it would be interesting to explore in future research would be the that suggested by Mirowsky and Ross (1990: 1531) that power over others may have rather different consequences than effective control over others.

Despite this departure from the expectations generated by the instrumental model of realism, our substantive conclusions do not differ significantly from those implied by the model. Thus, in general, effectiveness lies at the heart of the positive impact of sense of control. It is necessary to strike a balance between realism and optimism. The optimum level of sense of control is directly related to power and command over resources. The sense of control which is most beneficial to young professional workers who experience little in the way of life-style deprivation would be completely inappropriate for an unemployed manual worker living in a household in which basic items of food, heat and clothing are gone without.

Most people at all levels of control, however, are likely to benefit from enhanced feelings of control.

Fatalism and alienation are the recognition of a harmful reality and in no way soothe the discomforts. (Mirowsky and Ross, 1990, p. 1531).

The Irish respondents were much more likely than the American ones to fall below the optimum level of control. The

vast majority of them would benefit psychologically from greater optimism. A continuing emphasis on external attribution is psychologically harmful. Wheaton (1983) argues that instrumental coping leads to a search of the environment for potentially distressing conditions, to taking preventive steps, and to accumulating resources or developing skills or habits that will reduce the impact of the unavoidable. In contrast, fatalism leads to ignoring problems until they actually happen. In consequence, there is a magnification of differences with the fatalists suffering an increasing number of problems which reinforce a feeling of lack of control, in turn producing passivity in the face of difficulties. Lower class people may then carry a triple burden. They have more problems to deal with; their personal histories are likely to have left them with a deep sense of harmlessness and that sense of harmlessness discourages them from marshalling whatever energy and resources they do have in order to solve their problems. The result for many is a multiplication of despair.

Kane (1987, p. 405) notes that there has been a reluctance to discuss possible motivational deficits among deprived groups out of fear of becoming involved in blaming the victim. The battle lines have been drawn so that restricted opportunities and attitudes and values have been seen as competing rather than complementary explanations. It is possible, however, to view motivation as the outcome of a complex set of interactions in which restricted opportunity

plays a central role. Psychological theory predicts that when faced with what are perceived to be uncontrollable circumstances, people ultimately respond with helplessness. Kane (1987, p. 146 suggests there are three basic messages to be derived from such an analysis.

First, any motivational deficit observed among the persistent poor should not be thought of as an immutable personal pathology. Second, at the same time, someone who has been conditioned with a lack of control will not necessarily respond immediately to any new opportunities for control. Third, government can play a role, first in making real options available - in the way of jobs and education and just as important in making voluntarism salient as an opportunity for control. --

This perspective recognises that people in poor conditions tend to be overwhelmed by the weight of their problems. Community development interventions, for example, hold out the possibility that creating an environment which provides encouragement and support may facilitate people in realising their own untapped talents in order that they may be more effective within the constraints of their situations (Chanan and Vos, 1990, p. 52).

The fact that the correlation between sense of control and attribution of poverty to structural causes is close to zero suggests that it is possible to facilitate people in developing feelings of personal efficacy without encouraging the tendency to make scapegoats of the deprived.

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