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The Role of Perceived Control in the Adjustment of Some HIV-Positive People

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Abstract

This paper is concerned with a study on the role of perceived control over illness and its association with psychological adjustment in HIV-positive individuals. Following a discussion and critical assessment of predominant theories of perceived control, several cases are recruited and approached to study the significant role of perceived control that might involve in the adjustment of people who are diagnosed as HIV positive. More specifically, Two dimensions of perceived control (primary vs. secondary and central vs. consequence-related) were examined in Myanmar sample of 148 HIV-positive men and women. According to the results, two hypotheses regarding the use of primary control (acting to achieve specific outcomes) and secondary control (acceptance) were supported. The use of both primary and secondary control was associated with better adjustment. Secondary control served a proactive role at lower levels of primary control. The 2 hypotheses regarding central control (over the infection) and consequence-related control (over consequences of the infection) were also supported. Perceptions of consequence-related control were higher than preceptions of control over HIV and more strongly associated with less depression.

Key Words : Cognitive adaptation, Depression, Stressful event, HIV/AIDS

Introduction

The goal of the present study was to investigate the role of perceived control over illness and its association with psychological adjustment in people who are diagnosed as HIV individuals. Living with a diagnosis of HIV involves a variety of ongoing stressors from concerns about revealing one's status to loved ones to the anticipation of an early, painful death. It surely ranks as one of the more traumatic major life events that an individual might have to face. It is of major import, then, to understand how people make sense of and cope with a diagnosis of HIV.

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Several social psychological approaches to understanding how people react to life stressors give a central role to the construct of perceived control (Janoff-Bulman & Frieze, 1983; Taylor, 1983). Taylor's (1983) theory of cognitive adaptation to stressful events, for example, states that maintaining a sense of perceived control is one of three main themes of adaptive coping. Those who continue to believe that they have the ability to affect the outcomes they receive cope better with a stressful situation.

Although there is considerable evidence that people's perceptions of control are adaptive when they are faced with a stressful experience (Affleck, Tennen, Pfeiffer, & Fifield, 1987; Helgeson, 1992; Reed. Taylor, & Kemeny, 1993; Taylor, 1983), far less is known about how people manage to maintain a sense of control in stressful circumstances. On first reflection, sustaining personal control when undergoing a traumatic life event would seem to be an extremely difficult task because one would be confronted with strong evidence of a lack of control and an inability to avoid a highly undesirable experience.

Some researchers proposed that it is necessary to consider two distinctions among types of perceived control to understand how feelings of control could be sustained and have positive effects even when opportunities for influencing outcomes are limited. These distinctions are primary versus secondary control and central versus consequence-related control (Thompson et al (1994); Rothbaum et al (1982).

Primary versus Secondary Control

Rothbaum, Weisz, and Snyder (1982) distinguished between primary control and secondary control. Primary control is a belief that one can influence existing realities. Secondary control refers to gaining control by accepting realities.

In other words, primary control is a belief that one can act to obtain desired outcomes. Secondary control involves accepting one's situation through trusting to luck, fate, or God or reinterpreting the event in a more positive light. Although secondary control is a passive strategy, it is different from helplessness because the secondary control process involves a belief that some aspect of the situation is being improved through acceptance.

Secondary control may be an especially important process when individuals feel that there is little they can do directly to ameliorate their situation. The ability to

accept one's situation or trust that other forces will work for one's benefit could provide relief from the negative affect and sense of helplessness that is likely to be associated with a stressful situation that one can not directly improve.

There are two ways to conceptualize and measure secondary control. One way is to focus on the four aspects of secondary control as identified by Rothbaum et al. (1982); predictive (predicting results to protect against disappointment), illusory (trust in luck or chance), vicarious (faith in powerful others), and interpretive (deriving meaning from the event).

An alternative way to measure secondary control that circumvents some of these problems is to focus on the general process that characterizes secondary control acceptance of one's situation. Only a few studies have examined this conceptualization of secondary control. In one study, less depressed individual were more likely than those who were depressed to interpret situations as requiring their acceptance, suggesting that acceptance has benefits (Coyne, Aldwin, & Lazarus, 1981). Carver et al. (1993) found that acceptance among women with breast cancer was associated with lower distress. Both studies support the idea that acceptance may be an adaptive strategy.

Although Rothbaum et al. (1982) suggested that acceptance is a "back-up strategy", occurring when attempts at primary control are not successful, only one study to our knowledge has examined the ways in which primary and secondary control might interact to influence adjustment.

A better arena to test the interaction of primary and secondary control would be one where primary control was shown to produce some benefit. One goal of the present study was to examine the possibility that secondary control serves as a "second-line" strategy that is effective only when judgments of primary control are low using a chronic illness situation for which perceived control is generally adaptive.

Central versus Consequence-Related Control

A major negative life event has many aspects that one might want to control. The most central is escaping or avoiding the event itself (central control) through, for example, being cured of cancer or AIDS. In lieu of avoiding the stressor itself, control over the many consequences of the stressor (consequence-related control) could be desired. For example, some individuals might believe that they can

influence the extent to which a negative life event affects their emotional health, relationships, job situation, discomfort, or financial situation.

In a study of cancer patients, Thompson et al. (1994) found that control over the consequences of cancer was significantly more strongly associated with low levels of depression and anxiety than was the perception of control over the cancer itself. The prominence attached to consequence-related control makes sense in the context of maintaining control under adverse circumstances, especially if one assumes that there are more avenues for control over the consequences of a stressor like cancer or HIV than there are for control over the stressor itself. By focusing on areas where the possibilities for control are less constrained, individuals can sustain a belief in their sense of mastery even if the central event cannot be avoided or changed.

In fact, Thompson et at. (1994) examined two dimensions of perceived control (primary vs. secondary and central vs. consequence-related) in a sample of 104 HIV-positive men. They found that the use of both primary and secondary control was associated with better adjustment. Secondary control served a protective role at lower levels of primary control, but was not associated with adjustment at higher levels of primary. Moreover, they also found that perceptions of consequence-related control were higher than perceptions of control over HIV and more strongly associated with low depression. However, Thomson et al.'s conclusion may be limited because the sample may not be representative of other groups with chronic illness. They just used an American sample of men with HIV. So, it would be desirable to replicate these results with a Myanmar sample of men and women with HIV.

The Present Study

The general goal of the present study is to replicate the results of Thompson et al., with a Myanmar sample of not only men but also women with HIV and to test hypotheses about the adaptiveness of various types of control using comprehensive measures of primary, secondary, central, and consequence-related control. Four hypotheses will be examined:

Hypothesis 1. The use of both primary and secondary control will be associated with better psychosocial outcomes (less depression).

Hypothesis 2. Secondary control will be associated with less depression for those who have low beliefs in their primary control, but not for those who are confident in their abilities to affect desired outcomes. Thus, the association between secondary control and psychosocial outcomes will be stronger for those who have relatively low beliefs in primary control.

Hypothesis 3. Beliefs in consequence-related control will be higher than beliefs in control over HIV.

Hypothesis 4. Psychosocial outcomes will be more strongly related to consequence-related control than to central control. Thus, there will be a stronger relationships between consequence-related control and low levels of depression than between control over HIV and depression.

Method

Type of research carried out in the present study was an ex post facto research. Ex post facto research is systematic empirical inquiry in which the scientist does not have direct control of independent variables because their manifestations have already occurred or because they are inherently not manipulable. Inferences about relations among variables are made, without direct intervention, from concomitant variation of independent and dependent variables. Specifically, the present study was an ex post facto research which investigated the relation between perceived control and the adjustment of people who are diagnosed HIV positive.

Participants

The participants of the present study were made up of 148 individuals with HIV. More Specifically, they were a group 62 men with a diagnosis of HIV who received treatment at a medical clinic that specializes in the care of people with HIV and a group of 86 women with a diagnosis of HIV who were sentenced to imprisonment for their prostitution, in Social Welfare Reform-Camp, Mandalay which gives the care of imprisoned women with HIV. Their average age of respondents was 32 years. Mean education level was some "basic education". Ethnic group made up was 2 Shan people, 1 Kachin, l Kayin and 144 Myanmar people.

Measures

Primary Control Scale. The Primary Control Scale contains 24 items. To assess perceptions of primary control, participants were asked to rate each item. On a 5-point scale with not at all (1), a little bit (2), a moderate amount (3), quite a bit (4), and a great deal (5) as responses, they rated their control over the outcome, the extent to which they could directly influence the outcome.

Secondary Control Scale. The Secondary Control Scale consists of 24 items measure on 5-point scale from "Very difficult" to "not difficult at all". To assess perceptions of secondary control, participants were asked to rate each item. On the 5-point scale, the participants rated the extent to which they got a sense of control from accepting whatever happens relevant to outcome.

Central Control Scale. The Central Control Scale consists of 6 items. To assess perceptions of central control, participants were asked to rate each item. On a 5-point scale with not at all (1), a little bit(2), a moderate amount (3), quite a bit (4), and a great deal (5) as responses, they rated their control over the outcome, the extent to which they could directly influence the outcome.

Consequent-related Control Scale. The Consequent-related Control Scale contains 13 items rated on 5-point response scale with not at all (1), a little bit(2), a moderate amount (3), quite a bit (4), and a great deal (5). The participants rated their consequent-related control over the outcome, the extent to which they could directly influence the outcome.

Stressful Life Events Scale. The Stressful Life Event Scale consists of 22 items. Respondents were asked to check which of the events had happened to them in the previous month. The scale listed 22 events in five areas that are likely to be stressors for this group: relationships, medical care, grief/illness of others, financial/housing, and work.

Mandalay Depression Scale. The Mandalay Depression Scale is a standard scale that measures current level of depressive symptomatology and depressive affect. The scale contains 20 items are rated on 4-point scale ranging from rarely, or none of the time to most or all of the time.

Procedure

Male patients who are waiting for appointments in a medical clinic that specializes in the treatment of HIV-related illnesses were approached by the

researcher and were asked to participate in a questionnaire study of "Stress and Coping with HIV Disease." Participants were given an informed-consent form to read and sign. They then received a questionnaire to complete. The researcher received the permission from the chief of Social Welfare Reform-Camp, Mandalay which gives the care of women with HIV to recruit female participants for this study. Female participants were also given an informed-consent form to read and sign and received a questionnaire to complete.

Results

Levels of Stress

The respondents of present study, on average, indicated that 11.5 stressful events had happened to them in the last month. Moreover, scores of the respondents on the Depression Scale Mandalay (M = 20.6) appeared elevated, as the average level of depressive affect in the general population was between 13 and 15. In the present sample, the mean level of patient depression indicated that the average participant exhibited more depressive symptomatology than that would be expected in the general population in Myanmar. Thus, as expected, this sample of HIV-positive individual seemed to be experiencing relatively high levels of stress and psychological distress.

Correlation with Illness and Stress Variables

The present study examined the correlations among the four subscales, and depression and stress measures. As can be seen in Table 1, there were two significant, but small, correlations between stressors and beliefs in control. Those who reported more stressful events in the past month tended to have lower beliefs in secondary control and in central control.

To control for stress as alternative explanations for perceived control and psychological outcomes relationships, number of stressful events was controlled for in all analysis.

Hypothesis 1 and 2: Primary and Secondary Control

The correlations of depression with primary control are shown in Table 1. As predicted in Hypothesis 1, stronger beliefs in both primary and secondary control

were associated with less depression. These two relationships were significant even the number of stressors was partialed out.

Table 1. Correlations of Perceived Control Scale with Stress and Depression

Scale	No. of stressors	Depression	Partial r depression, with controlling for No. of stressors
Primary control	.09	–.28**	–.35***
Secondary control	–.38**	–.35**	–.242***
Central control	–.19*	–.17*	–.27***
Consequence control	.08	–.38**	–.28***

*p < .05 **p < .01 ***p < .001

A multiple regression analysis was performed, predicting depression from primary control, secondary control, and their interaction. Number of stressors was forced to enter the equation first, then the two types of control were entered, and finally the interaction, the final multiple correlations .49, $F(3, 144) = 15.32$, $p < .01$. After number of stressful events and the main effects were factored into the equation, the interaction of primary and secondary control was significantly related to depression $(B = -5.47, p < .01)$.

To interpret the interaction, a median split on primary control was conducted to create a high (n = 74) and low (n=74) primary group. The correlation between secondary control and depression was graphed for each group. As indicated in Figure 1, there was only a weak relationship between secondary control and depression for high primary control group. For those who were low in primary control, however, high beliefs in secondary control were associated with low depression. Thus, the prediction of Hypothesis 2 was supported by this form of interaction.

Hypothesis 3 and 4: Central versus Consequence **Related Control**

As expected, respondents have higher beliefs that they could control consequences of having HIV (M = 29.24) than the infection itself (M =13.95).

Central Control, Consequence-Related Control, and Depression

As, can be seen in Table 1, the results show that the correlation between consequence-related control and depression was stronger than that between central

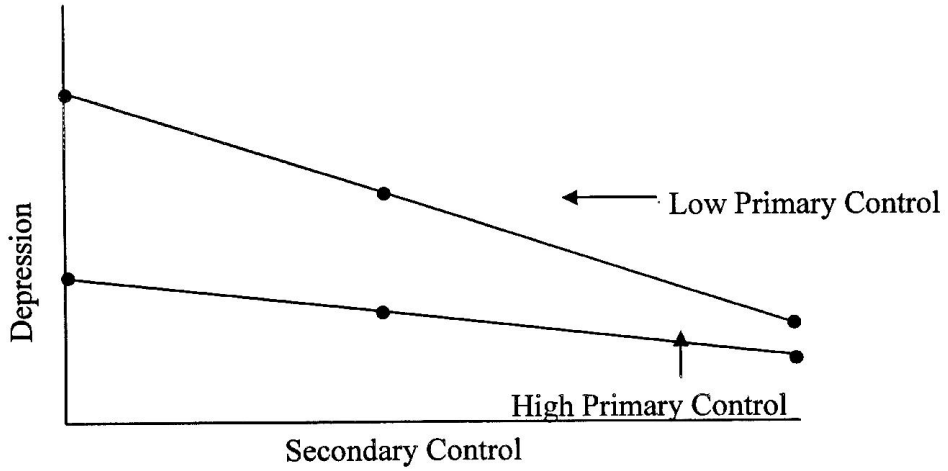

Figure 1. The relationship between secondary control and depression at low and high levels of primary control

control and depression. The relative strength of the correlations of the two types of control was tested using multiple regression analysis to determine the ability of each type of control to predict depression when the effect of the other type of control was controlled for.

In the first multiple regression, stress variable was entered, then central control, and then consequence related control. The final multiple correlation of .48 was significant, F (3, 144) =13.96, $p < .001$. Consequence- related control accounted for a substantial and significant amount of the variance in depression after stress and central control was accounted for (R^2 change = 8.69%, F=18.96, p<.001). Thus, consequence-related control had a strong relationship with depression, even when the variance it shared with central was partialed out.

In the second multiple regression, the stress variable was entered first, then the consequence-related control and then central control. The final multiple correlation was the same as that in the first equation. Central control did not add to prediction of depression after the variables were accounted for ((R^2 change = 4.65%, F = 19.82, p <. 001).

Discussion and Conclusion

In this study, all four hypotheses about the adaptiveness of four types of control were supported. The results tell us something about how individuals maintain perceived control in very stressful circumstances.

Primary and Secondary Control

We found that the individuals living with HIV in this study were less depressed when they had higher beliefs in primary control--their ability to directly obtain desired outcomes--and when they had stronger beliefs in secondary control--the extent to which they could adjust to and accept the outcomes they received. This finding was consistent with Thompson et al's finding that the use of primary and secondary control was associated with better adjustment and also supported the Rothbaum et al.'s (1982) formulation of two control processes: Beliefs both in active engagement and in more passive acceptance can have beneficial effects.

This study also found evidence to suggest that secondary control plays a back-up role. It appeared to have little effect on depression for individuals who had strong beliefs in their primary control. However, for those with low beliefs in primary control, perceptions of secondary control were associated with less depression. Thus, one way to maintain a sense of control in very stressful circumstances is to focus on accepting the situation, especially if actively working to effect change does not seem feasible. This finding also supported the finding of Thompson et al (1994) that secondary control served a proactive role at lower levels of primary control. However, both Thompson et al's finding and the finding of this study showed that another possible interpretation of the primary-secondary control interaction effects for adjustment is that secondary control is useful only when the situation is objectively uncontrollable. In other words, the adaptiveness of secondary control depends on the controllability of the situation, not on the respondent's primary control beliefs.

Central and Consequence-Related Control

As expected, beliefs in control over HIV infection (central control) were not as strong as beliefs in control over other areas of life (consequence-related control). This result is important because it establishes that beliefs in control can be maintained in an area outside of influencing the stressor itself. Furthermore, consequence-related control was significantly more strongly associated with less depression than was

central control. This allows the possibility of enhancing one's sense of control by focusing on less central outcomes when the stressor does not seem amenable to change. Thus, one strategy that people might use to maintain a sense of control in adverse circumstance is to focus on area where they feel that they can exert influence, even if those areas are not seemingly as central as removing or avoiding the major stressor. This idea formulated by Thompson (1994) is supported by the finding of present study that perceptions of consequence-related control were higher than perception of control over HIV and more strongly associated with low depression.

Implication of Control Theory

Like in other studies (Rothbaum et al., 1982; Thompson et al., 1994), the ways in which HIV-positive men maintained perceptions of control in this study suggest that control beliefs are more complex than simply judging that one can influence outcomes. The first complexity involves change versus acceptance.

Change Versus Acceptance. Rothbaum et al. (1984) and Thompson et al. (1994) made a major contribution to psychology of perceived control by proposing two control processes and emphasizing that the response to a stressor do not necessarily indicate helplessness. The results of this study support and extend their frame work. For the HIV-positive individuals in this study, acceptance was associated with better psychological outcomes, particularly when beliefs in primary control were low. The low direct influence-high acceptance group would have mistakenly been seen as "helpless" if a distinction between primary and secondary control had not been made.

Perhaps because an active sense of control is more compatible with the values of mainstream Western culture (Weisz, Routhbaum, & Blackburn, 1984), acceptance has not received the research attention that has been accorded primary control. However, it is clear that a broad conception of perceived control is needed—one that does not focus exclusively on active strategies to change the stressful situation but includes the possibility of getting sense of control from accepting one's circumstances.

This study was conducted in Myanmar, a nation of Oriental culture. We found that the participants of this study seem to have higher in secondary control. For example, one male participant in his age of 30 said as follow:

I got a little nervous and upset when I knew that I have HIV. Being an IDU, I have already expected to have that disease. To comfort myself, I accept fate which we

cannot change and deny. After one year later, I have no excitement and live like a normal person. So I no longer feel disappointed and try to face life very lightly. I can control myself by religion, knowledge and experience. I got understanding, acceptance and help from my family and friends, but only to a certain extent.

For this reason, we can conclude that not only primary control but also secondary control is universal and beneficial for individuals who react to life stressors in every culture. Moreover, although Thompson et al.'s study used sample of male participants on the perceived control of HIV-positive men, the present study used sample of male and female participants. Thus, the generalizability of the present study seems to be strong.

Different Spheres of Control

The second complexity that researchers address involves the distinction between controlling the event itself and controlling other aspects of daily life that may

be affected by the event. Similar to what has been found with cancer patients (Thompson et al., 1993), the perceptions of HIV-positive men that they can control the day-to-day ramifications of the stressor are more important psychosocially than their perceived control over the source of the stress.

The fact that perceived control in different areas of life can have different effects suggests that overall assessments of perceived control are too general to capture the specific, and at times, contradictory effects of different types of perceived control. For example, not only in Thompson et al. (1994) study but also in this study we found that consequence-related control was more strongly associated with low depression than was central control.

This finding seems to indicate that the belief that one can control HIV infection specifically has two separate components: (a) a general sense of mastery and influence that also contributes to consequence-related control and that is associated with better psychological adjustment and (b) a sense that one can control the illness itself that is not necessarily related to psychological adjustment.

Limitations of the Study

A Problem with the interpretation of the present study is that it is possible that a general disposition to respond in a negative manner (termed negative affectivity)

may be responsible for the relationship between perceived control and depression. This is a concern because some research has found that negative affectivity accounts for the correlation between personality factors and reports of illness and distress.

A second problem is that we have a difficulty to measure of disease severity such as CD4 count and symptoms of AIDS. Although the goal of the present study was to investigate perceptions of control over illness (both in terms of illness course and illness consequences and it can be accomplished, the weakness of the present study is lack of examination between realistic acceptance of illness in people with late-stage AIDS and that in people with just HIV positive.

Interventions

This study suggests two avenues for increasing feelings of control. The first is to acknowledge that changing one's situation is not the only source of feeling of mastery. A sense of control can also be developed from the perception that one can successfully adjust to adversity and accept undesirable circumstances. This process is similar to Frankl's ideas about the search for meaning in which perceived control can be maintained through finding meaning in adverse situation through the belief that there is always one optional control, that is, to control one's own attitude toward suffering. Psychotherapists or counselors can approach their work with HIV-positive patients and help them make sense of what is happening to them, encourage them to find an acceptable positive focus, or work on ways to accept the aspects of the experience that cannot be changed would be avenues for that one is a "survivor" who has successfully handled adversity is a secondary control perception that could increase feelings of mastery.

To psychotherapists or counselor who work with HIV-positive patients, the second type of intervention is to encourage individuals to focus on the aspects of the situation that are under their control, even if these do not involve avoiding or escaping the central event itself. For example, Perlmuter and Langer (1982) found that individuals can enhance their perceptions of control by making lists of outcomes that they can influence throughout the day, or working on enhancing their control in areas where direct influence is feasible.

Conclusion

The finding of present study that perceptions of control over illness were positively associated with adjustment is consistent with much of the empirical

research examining adjustment to chronic illness (e.g., Taylor et al., 1984, 1991; Thompson et al., 1994). Although the present study on the perception of control over a stressful experience was carried out with a sample of Myanmar population in Oriental culture, the results were consistent with those of studies conducted in Western culture. Thus, the many benefits of perceived control were found to be realized even by individuals infected with a serious and, most likely, fatal disease in every society and every culture.

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References

Affleck, G., Tennen, H., & Gershman, K.(1985). Cognitive adaptations to high-risk infants: The search for mastery, meaning, and protection from future harm. *American Journal of Mental Deficiency; 89,* 653-656.

Affleck, G., Tennen, H., Pfeiffer, C, & Fifield, C. (1987). Appraisals of control and predictability in adapting to chronic disease. *Journal of Personality and Social Psychology; 53,*273-279.

Carver, C. S., et al.(1993). How coping mediates the effects of optimism on distress: A study of women with early stage of breast cancer. *Journal of Personality and Social Psychology; 65,* 375-390.

Coyne, J. C, Aldwin, C, & Lazarus, R. S.(1981). Depression and coping in stressful episodes. *Journal of Abnormal Psychology*; *90,*439-447.

Helgeson, V. S.(1992). Moderators of the relation between perceived control and adjustment to chronic illness. *Journal of Personality and Social Psychology; 63,* 656-666.

Janoff-Bulman, R., & Frieze, I. H.(1983). A theoretical perspective for understanding reactions to victimization. *Journal of Social Issue; 39(2),* 1-17.

Mendola, R., Tennen, H., Affleck, G., McCann, L & Fitzgerald, T.(1990). Appraisal and adaptation among women with impared fertility. *Cognitive Therapy and Research, 14,* 79-93.

Reed, G. M., Taylor, S. E & Kemeny, M. E.(1993). Perseived control and psychological adjustment in gay men with AIDS. *Journal of Applied Social Psychology; 23,* 791-824.

Rothbaum, F., Weisz, J., and Snyder, S.(1982). Changing the world and changing the self: A two-process model of perceived control. *Journal of Personality and Social Psychology; 42,* 5-37.

Silver, R. L., Boon, C, & Stones, M. H.(1983). Searching for meaning in misfortune: Making sense of incest. *Journal Social Issue; 39(2),* 81-101.

Taylor, S. E.(1983). Adjustment to threatening events: A theory of cognitive adaptation. *American Psychologist;* 56, 640-648.

Thompson, S. C, Nanni, C, & Levine, A. (1994). Primary versus Secondary and Central versus consequence-related control in HIVpositive men. *Journal of Personality and Social Psychology; 67,* 540-547.