

AD-756 699

CONFIDENCE IN HUMAN NATURE AND LEADER-
SHIP STYLE

Delbert M. Nebeker, et al

Washington University

Prepared for:

Office of Naval Research
Advanced Research Projects Agency

May 1972

DISTRIBUTED BY:

NTIS

National Technical Information Service
U. S. DEPARTMENT OF COMMERCE
5285 Port Royal Road, Springfield Va. 22151

AD756699

ORGANIZATIONAL RESEARCH

DEPARTMENT OF PSYCHOLOGY • UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON

CONFIDENCE IN HUMAN NATURE AND

LEADERSHIP STYLE

Delbert M. Nebeker and Robert O. Hansson

University of Washington
Seattle, Washington

Technical Report 72-37

May 1972

Reproduced by
NATIONAL TECHNICAL
INFORMATION SERVICE
U S Department of Commerce
Springfield VA 22151



232

ORGANIZATIONAL RESEARCH
DEPARTMENT OF PSYCHOLOGY
UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON



CONFIDENCE IN HUMAN NATURE AND
LEADERSHIP STYLE

Delbert M. Nebeker and Robert O. Hansson

University of Washington
Seattle, Washington

Technical Report 72-37

May 1972

Contract NR 177-472, N00014-67-A-0103-0012
Office of Naval Research, Department of the Navy

and

Contract NR 177-473, N00014-67-A-0103-0013
Advanced Research Projects Agency, Office of Naval Research

REPRODUCTION IN WHOLE OR IN PART IS PERMITTED FOR
ANY PURPOSE OF THE UNITED STATES GOVERNMENT.

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) Organizational Research Department of Psychology, University of Washington Seattle, Washington 98195		2a. REPORT SECURITY CLASSIFICATION Unclassified	
		2b. GROUP	
3. REPORT TITLE Confidence in Human Nature and Leadership Style			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Technical Report 72-37, May, 1972			
5. AUTHOR(S) (First name, middle initial, last name) Delbert M. Nebeker and Robert O. Hansson			
6. REPORT DATE May, 1972	7a. TOTAL NO. OF PAGES 1723	7b. NO. OF REFS 13	
8a. CONTRACT OR GRANT NO. N00014-67-A-0103-0012	9a. ORIGINATOR'S REPORT NUMBER(S) TR 72-37		
b. PROJECT NO. 177-472			
c. 177-473	9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)		
10. DISTRIBUTION STATEMENT Distribution of this document is unlimited.			
11. SUPPLEMENTARY NOTES None.		12. SPONSORING MILITARY ACTIVITY Office of Naval Research, Dept. of Navy and Advanced Research Projects Agency, U.S.N.	
13. ABSTRACT Three studies are presented in support of a parsimonious interpretation of Fiedler's LPC scale which has been related consistently to leader effectiveness. Two of the studies found that undergraduate psychology students who scored higher on the LPC scale expressed a more optimistic view of human nature. A field study then found that park employees who scored higher on the LPC scale were more willing to endorse park policies permitting increased personal freedom for youngsters in parks. These findings supported an interpretation of LPC as a personality construct based upon confidence in human nature.			

II

CONFIDENCE IN HUMAN NATURE AND LEADERSHIP STYLE¹

Delbert M. Nebeker and Robert O. Hansson

University of Washington

The Least Preferred Coworker score (LPC) has been shown to be related systematically to supervisor effectiveness in a wide range of settings (Fiedler, 1967, 1972). The consistency of Fiedler's findings has prompted reviewers to consider his Contingency Model of leadership effectiveness to be the most important development in leadership theory in the past decade (Hinrichs, 1970), and to hold promise of definition in a field "heavy in research, but lacking in theory [p. 363]" (Shaw & Constanzo, 1970).

Fiedler's theory seeks to explain group effectiveness in terms of a model which incorporates both leadership style and the favorableness of the situation in which the leader is working (Fiedler, 1967).

The LPC scale is a reliable and easily administered series of bipolar semantic differential items on which the subject is asked to describe the person with whom he has had the most difficulty working. Someone who describes his least preferred coworker in relatively positive terms is considered a high LPC and one who describes his least preferred coworker in relatively negative terms is considered a low LPC.

However, a clear understanding of LPC as a personality variable has not been established (Fiedler, 1967, 1972). This has been an extremely perplexing problem, especially when one considers the consistency with which

¹This research was supported by Contract N00014-67-A-0103-0012, Office of Naval Research, Department of the Navy, and by Contract N00014-67-A-0103-0013, Advanced Research Projects Agency, Office of Naval Research (Fred E. Fiedler, Principal Investigator).

LPC has been related to group performance. Over the past 15 years a number of substantial attempts to explain LPC have been made. LPC has been explained most often as a measure of the task and relationship orientation of a leader (Fiedler, 1967), alternatively as the cognitive complexity of the leader (Mitchell, 1970), and most recently as an index of the motivational hierarchy of the leader (Fiedler, 1972). Many other possible explanations have been considered and discarded for lack of support. Attempts to relate LPC to over 65 other personality and biographical variables have been almost totally unsuccessful (Fiedler, 1967, 1972). Mitchell (1970) found a positive relationship between LPC and cognitive complexity. It was, however, too small to support an extensive reinterpretation of the meaning of leadership style as measured by LPC.

It is not the intention of this paper to offer a complete discussion of the three major interpretations of LPC listed above. Suffice it to say that the interpretation of the LPC score as a measure of task-relationship orientation (i.e., high-LPC subjects are relationship-oriented and low-LPC subjects are task-oriented) has received neither theoretical nor empirical support. It is theoretically impossible for a unidimensional scale score such as LPC to be related strongly to two orthogonally constructed factor scores of another scale. The interpretation of LPC as a task-relationship orientation would require such relationships. It was, in fact, evidence inconsistent with this interpretation which led to the development of the motivational hierarchy interpretation of LPC (Fiedler, 1972).

The most recent interpretation of the LPC score as reflecting a motivational hierarchy is an a posteriori explanation that was developed

to account for data on leader behavior and LPC (Fiedler, 1972). This interpretation is also congruent with Larson's (1972) data on leader behavior under stress. However, because of its isolation from the personality and interpersonal influence research, and the intractability of its constructs, this interpretation to date has not been directly tested and, therefore, has not been validated.

The value of any theory is, in part, determined by the ability of its constructs to generate new hypotheses and to extend its explanatory value. If Fiedler's Contingency Model is to do this, the meaning of LPC must be established empirically and related to the larger body of research in the areas of personality and interpersonal influence. This paper attempts to support an interpretation of LPC which is parsimonious, related to a larger body of research, and which suggests some new and interesting hypotheses.

In trying to understand why some people reliably describe their least preferred coworker more favorably than others we asked, naively: "Could it be that some people just have more positive, trusting, confident, and optimistic attitudes toward people in general, and that this predisposition is simply reflected in their LPC scores?" Wrightsman (1964) has shown that people differ in their beliefs about basic human nature. Some believe it to be positive, some negative, and others believe it to be neutral. Kluckhohn and Strodtbeck (1961) and McGrath (1962) found that an individual's membership in different cultural and socio-religious groups was related to his beliefs about basic human nature.

If one's LPC score is a reflection of one's confidence in human nature, it should be possible to relate LPC scores empirically to a direct measure

of confidence in human nature and in predictable ways to related measures. One such related measure is likely to be the degree of personal freedom that an individual in a position of relative power or influence would allow others to exercise. It may be assumed that one who has a great deal of confidence in human nature (i.e., feels that people are good, trustworthy, socially motivated, competent, etc.) will be more willing to permit people greater personal freedom and will be less likely to seek or exercise control over their activities. Thus, the LPC score should be related to measures of a person's willingness to permit personal freedom and to restrain the exercise of control.

Hypotheses

Hypothesis 1. LPC is positively associated with a direct measure of confidence in human nature.

Hypothesis 2. LPC is positively associated with a willingness to endorse policies of personal freedom.

Hypothesis 3. LPC is negatively associated with a willingness to endorse policies of control.

Study I

Method

Twenty University of Washington students completed Fiedler's LPC scale and a measure of their confidence in human nature. Confidence in human nature was measured by a modified version of McGrath's (1962) six-item, "Basic Nature of Man" scale, revised to eliminate religious connotations (see Appendix A). Scores on the scale indicate an S's position on a continuum of beliefs from 'human nature is inherently bad and cannot be changed,' to 'human nature is inherently good and cannot be changed.'

Results

The correlation between LPC and belief in human nature was .57 ($p < .005$, $df = 18$). A chi-square analysis was also performed. LPC was split into three levels on the basis of normative score distributions (Posthuma, 1970). The human nature scale was also divided into three levels based on the possibility of scores being positive, zero, or negative. The resulting 3×3 contingency table visually displays the relationship between LPC and confidence in human nature. Even though the sample size was small, the chi-square was significant and there was a moderate degree of association between LPC and confidence in human nature (see Table 1). The hypothesis that a person's LPC is positively related to his level of confidence in human nature was supported.

Insert Table 1 about here

Study II

Method

Study II was a replication of Study I, using the same instruments and procedures with 52 University of Washington students as respondents.

Results

The correlation between LPC and confidence in human nature was not significant. However, the mean LPC in Study II was found to be significantly higher than the mean of the established norm ($t = 4.45$, $p < .001$) suggesting that an overrepresentation of high LPC and high confidence in human nature ratings could be responsible for an attenuation of the correlation coefficient. Support for this conclusion was found when the

TABLE 1

 χ^2 Analysis for LPC \times Human Nature Rating

Human Nature Ratings	LPC Categories			Row Sum	χ^2	phi
	High	Med.	Low			
Study 1						
Positive	4	3	0	7	11.52* (df=4)	.54
Neutral	5	3	1	9		
Negative	0	1	3	4		
Column Sums	9	7	4			
Study 2						
Positive	17	6	4	27	36.00** (df=4)	.56
Neutral	9	8	1	18		
Negative	4	0	3	7		
Column Sums	30	14	8			

* $p < .025$ ** $p < .001$

chi-square test was performed on the data. Scores were categorized using the same criteria as in Study I. The chi-square was significant and, again, a moderate degree of association was found between LPC and confidence in human nature (see Table 1). These results also offer support for the first hypothesis.

Study III

Method

As a test of the generalizability of the findings of Studies I and II, a field study was conducted on a different population using a different instrument. Forty-two summer employees in a county park department (lifeguards, swimming instructors, playground leaders) completed Fiedler's LPC scale and an a priori scale designed to assess the level of their willingness to permit youngsters personal freedom in parks.

It was assumed that park employees who had a high level of confidence in human nature would be more willing to trust young park users with personal freedom under most circumstances. Consequently, this scale contained 10 hypothetical policy statements regarding how youngsters should be treated while at park facilities (see Appendix B). The policy statements ranged from a position of advocating strong control of youngsters, for example: "Parks should be a place where youngsters will be well supervised and kept out of trouble"; to a position of advocating complete personal freedom for youngsters, for example: "Parks should be a place where youngsters will have a chance to explore friendships and activities which may not be permitted at home." Five of the policy statements advocated some degree of personal freedom, and five advocated some degree of control. Subjects were asked to indicate on a five-point scale how strongly they agreed or disagreed

with each of the 10 hypothetical policy statements concerning the degree to which youngsters should be controlled or permitted personal freedom while at park facilities.

The five items advocating some degree of control over youngsters in parks were summed to produce a "control" score, and the five items advocating personal freedom were summed to produce a "personal freedom" score. On the basis of the median score on each of these scales, Ss were divided into high and low "freedom" scorers, and high and low "control" scorers.

Results

A two-way analysis of variance was computed to determine the relationship between a person's "control" and "personal freedom" scores and his LPC score. Table 2 summarizes this analysis of variance.

Insert Table 2 about here

A significant main effect for "personal freedom" scores was obtained ($p < .01$). However, contrary to our expectations, no main effect was found for Ss' "control" scores, and there was no interaction effect between the "control" and "freedom" scores.

The relationships between Ss' "control" and "freedom" scores and their LPC scores are presented in Figure 1. The mean LPC score in each of the four conditions was as follows: low freedom-high control, 55.30 (N=10); high freedom-high control, 67.20 (N=10); low freedom-low control, 56.00 (N=13); high freedom-low control, 72.33 (N=9).

Insert Figure 1 about here

TABLE 2
Analysis of Variance: Study III

Source	df	MS	F
Control Score (A)	1	87.69	.38
Freedom Score (B)	1	2054.30	8.96*
A x B	1	50.65	.22

* $p < .01$

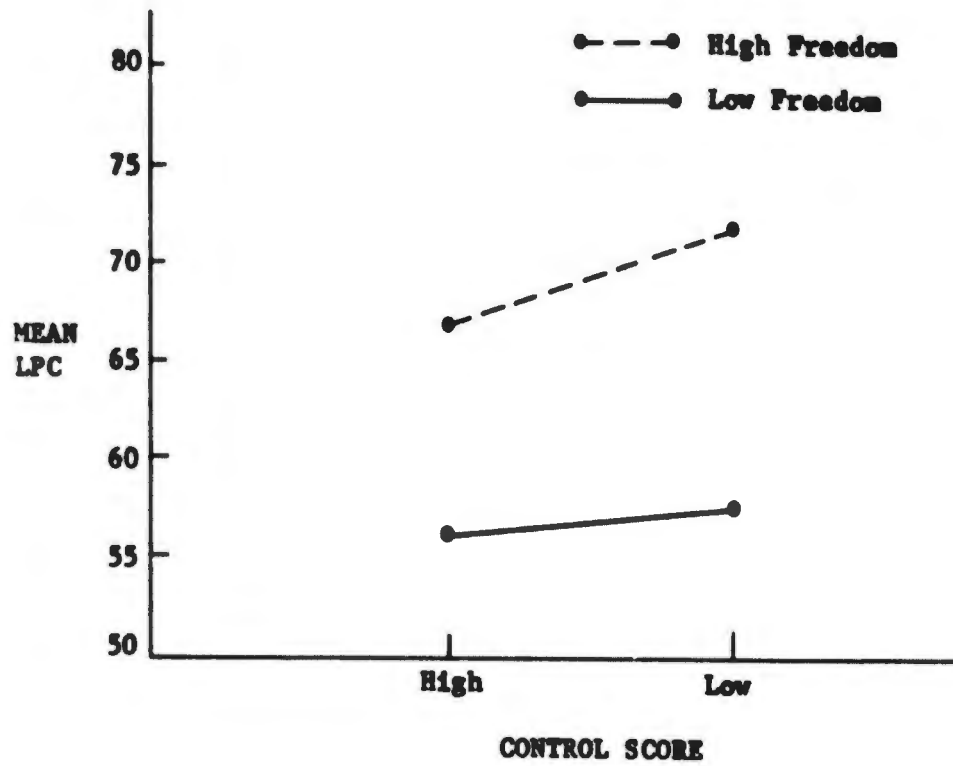


Figure 1

LPC Score as a Function of Freedom Score
and Control Score (Study III)

Our failure to establish a relationship between LPC and a person's willingness to endorse policies of rigid control--when a main effect for the freedom scale was found--could indicate one of two possible explanations. It was expected that freedom and control would be the opposite poles of the same dimension, and that Ss who scored high on one scale would score low on the other. It may be, however, that a basic trust or confidence in people permits an easily generalizable application to real-life settings, whereas the application of rigid control is more influenced by the characteristics and practical parameters of a given situation. However, it should also be acknowledged that the scale was constructed on a rational--and not empirical--basis, and was designed for the population on which it was used. The failure to find a relationship between LPC and a willingness to endorse policies of rigid control, therefore, may have resulted from the scale construction and not from the lack of such a relationship.

This explanation has some support, as can be seen in Figure 1. Ss in the high freedom-low control condition had the highest mean LPC, whereas Ss in the low freedom-high control condition had the lowest mean LPC. This suggests that the control items begin to tap the expected relationship, but that the scale is not yet sufficiently refined. Reference to the actual scale items (see Appendix B) suggests that a lack of control items of the same extremity as the freedom items may account for the failure of the control scale to differentiate between Ss. An effort must now be made to construct and validate a scale which reliably discriminates between LPC scores on the basis of one's endorsement of both personal freedom and rigid personal control policies.

Discussion

It has been established that the LPC score is consistently related to a person's leadership effectiveness. However, failure to empirically interpret the LPC scale itself has limited its generalizability, as well as its power to explain the leadership process. The value of LPC in predicting leader effectiveness makes it essential to interpret and understand the nature of this dimension.

The present studies show the LPC score to be positively associated with a direct measure of confidence in human nature and to a derived measure of willingness to permit personal freedom. By replicating Study I and by the use of the tolerance-for-personal-freedom measure in a field setting, some support for an interpretation of LPC as a measure of a person's confidence in human nature was obtained. The authors view these findings as the beginnings of a nomological net, interpreting LPC as a personality construct organized around a basically positive-negative interpersonal bias. The present findings do not enable us to determine the relative merits of this interpretation of LPC as compared to the motivation hierarchy interpretation. It would appear that interpreting LPC as confidence in human nature would provide a more parsimonious personality construct. A critical test between the two interpretations would be highly desirable.

Implications for Future Research

The implications of interpreting LPC as a measure of confidence in human nature lie in two major areas: (a) understanding the leadership process within the Contingency Model, and (b) relating leadership style to the broader literature of interpersonal influence.

The Contingency Model holds that low LPC leaders are more effective in situations in which they have either very high, or very low control or influence, while high LPC leaders are more effective in situations in which they have only moderate control or influence. The Contingency Model, then, sets forth the interaction between leadership style and the situation involved in leader effectiveness.

Assuming that a leader is most likely to choose a course of action which he feels has the greatest chance of success, and that the appropriateness of his course of action will determine performance, what happens in the Contingency Model may be explained as a cognitive decision process with both the situation and the leader's confidence in human nature determining which course of action the leader chooses. For example, a leader who has little confidence in human nature might, when working in a difficult situation, be more inclined to adopt a safer strategy of employing a high degree of control over the activities of his subordinates than would a leader who has a high level of confidence and trust in human nature. In order to test this hypothesis, it is suggested that research be done to determine whether high- and low-LPC leaders have different management strategies and whether these strategies change across situations. It is also a distinct possibility that the most important leader behaviors useful in understanding the Contingency Model are behaviors related to the type and amount of control a leader attempts to use with his subordinates. Research is also needed to clarify this possibility.

Interpreting LPC as a measure of confidence in human nature has one further, very important implication for research on leadership style as it is defined within the Contingency Model. Such an interpretation of LPC

provides a link between Fiedler's findings on leadership effectiveness, and a number of other theories with implications for the leadership process, in particular, McGregor's (1960) Theory "X" and Theory "Y," and Machiavellianism (Christie & Geis, 1970). McGregor discussed two theories of management: Theory "X" and Theory "Y." The assumptions of Theory "X" included having very little confidence in human beings, resulting in the requirement that their activities on the job be structured, controlled and checked frequently. Conversely, Theory "Y" assumed a high degree of confidence in human beings, requiring very little structure or control over their activities, and allowing them to use their own judgment.

In view of the present findings, there exists a strong possibility that there is a very rich conceptual relationship between LPC and Theory "X" and Theory "Y" management. This is an especially interesting hypothesis which needs to be explored empirically. Michaelsen (1971) has already shown that supervisors who score high on a Theory "X" orientation scale toward their subordinates, under varying degrees of situational favorableness, behave similarly to low-LPC leaders in Fiedler's data. He also found that supervisors low on the Theory "X" orientation behaved similarly to high-LPC leaders under those conditions. Relating McGregor's theory conceptually to the Contingency Model would be an important step in the integration of leadership theory into the broader literature of management and organization theory, and would certainly appear to justify definitive research on the question.

The final suggestion for research comes from recent research on Machiavellianism. Christie and Geis (1970) report that (a) Machiavellianism

is negatively related to one's philosophy of human nature, (b) Machiavellianism is negatively related to one's esteem for his coworkers, (c) Machiavellianism is positively related to one's manipulateness in interpersonal situations, and (d) that high Mach SS tend to outmanipulate low Mach's in laboratory situations. These reported findings suggest that LPC should also be related to Machiavellianism and its correlates. Research is needed to explore more fully the bounds and extent of this relationship and would seem vital in view of the extensive experimental literature concerned with the tactics and effectiveness of high Mach's in interpersonal situations.

The authors believe that interpreting LPC as a measure of a person's confidence in human nature promises to tie together a rather diverse collection of research efforts into an integrated network of constructs, greatly increasing their explanatory value.

References

- Christie, R., & Geis, F. Studies in machiavellianism. New York: McGraw-Hill, 1970.
- Fiedler, F. E. A theory of leadership effectiveness. New York: McGraw-Hill, 1967.
- Medler, F. E. Personality, motivational systems, and behavior of high and low LPC persons. Human Relations, 1972, in press.
- Hinrichs, J. R. Psychology of men at work. Annual Review of Psychology, 1970, 21, 519-554.
- Kluckhohn, F., & Strodtbeck, F. L. Variations in value orientations. Evanston; Illinois: Row, Peterson, 1961.
- Larson, L. L., & Rowland, K. M. Leadership style, stress, and behavior in task performance. Unpublished manuscript, Southern Illinois University, 1972.
- McGrath, J. E. Value-orientations, personal adjustment, and social behavior of members of three American religious groups. USPHS Technical Report No. 15. Urbana, Illinois: Group Effectiveness Research Laboratory, University of Illinois, 1962.
- McGregor, D. The human side of enterprise. New York: McGraw-Hill, 1960.
- Michaelsen, L. K. Leader orientation, leader behavior, group effectiveness, and situational favorability: An extension of the Contingency Model. Unpublished manuscript, University of Michigan, 1971.
- Mitchell, T. R. Leader complexity and leadership style. Journal of Personality and Social Psychology, 1970, 16(1), 166-174.

- Posthuma, A. B. Normative data on the Least-Preferred Co-worker scale (LP-) and the Group Atmosphere questionnaire (GA). ARPA Technical Report No. 70-8. Seattle, Washington: Organizational Research Group, University of Washington, 1970.
- Shaw, M. E., & Costanzo, P. R. Theories of social psychology. New York: McGraw-Hill, 1970.
- Wrightman, L. S., Jr. Measurement of philosophies of human nature. Psychological Reports, 1964, 14, 743-751.

Nebeker

APPENDIX A

Human Nature

What is the basic nature of man? Is he inherently good or bad, both of these, or neither? Whatever his basic nature, can it be changed by human efforts, or is it unchangeable?

Please indicate the degree to which you agree with each of the following statements by circling the appropriate number on each of the following scales.

1. Human nature is inherently bad and cannot be changed.
Strongly agree 7 6 5 4 3 2 1 Strongly disagree

2. Human nature is inherently bad, but can be changed.
Strongly agree 7 6 5 4 3 2 1 Strongly disagree

3. Human nature is inherently neither good nor bad; man becomes good or bad by the way he leads his life.
Strongly agree 7 6 5 4 3 2 1 Strongly disagree

4. Human nature is neither good nor bad--the concepts of good and bad are not applicable for describing human nature.
Strongly agree 7 6 5 4 3 2 1 Strongly disagree

5. Human nature is inherently good, but can be changed.
Strongly agree 7 6 5 4 3 2 1 Strongly disagree

6. Human nature is inherently good and cannot be changed.
Strongly agree 7 6 5 4 3 2 1 Strongly disagree

Nebeker

APPENDIX B

Please indicate the degree to which you agree with the following statements by circling the appropriate number on each of the following scales.

To the extent that young people spend their free time in parks and recreational areas, it is important to make these areas a place:

1. Where youngsters will be taught to get along together in a civilized manner.
Strongly agree 5 4 3 2 1 Strongly disagree
2. Where youngsters let off steam in some appropriate activity.
Strongly agree 5 4 3 2 1 Strongly disagree
3. Where youngsters will be taught sportsmanship.
Strongly agree 5 4 3 2 1 Strongly disagree
4. Where youngsters will be well supervised and kept out of trouble.
Strongly agree 5 4 3 2 1 Strongly disagree
5. Where youngsters will be taught our society's social values (e.g., good from bad, right from wrong, fair from unfair, etc.).
Strongly agree 5 4 3 2 1 Strongly disagree
6. Where youngsters will have a chance to explore friendships and activities which may not be offered at home.
Strongly agree 5 4 3 2 1 Strongly disagree
7. Where youngsters will have a chance to explore friendships and activities which may not be permitted at home.
Strongly agree 5 4 3 2 1 Strongly disagree
8. Where youngsters will meet all kinds of people.
Strongly agree 5 4 3 2 1 Strongly disagree
9. Where youngsters will be free to experiment with life and decide which of society's values they feel they should accept and which they should reject.
Strongly agree 5 4 3 2 1 Strongly disagree
10. Where youngsters will be free to learn what kind of person they want to be.
Strongly agree 5 4 3 2 1 Strongly disagree