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AMONG SOCIAL WORK STUDENTS

ЬУ

Jodi G. Kershner

A Thesis
Submitted to the Faculty of Graduate Studies
through the Department of Psychology
in Partial Fulfillment of the
Requirements for the Degree
of Master of Arts at the
University of Windsor

Windsor, Ontario, Canada 1985

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ABSTRACT

The present study was aimed at exploring personality subtypes among 144 first year social work students at the University of Windsor. Two subtypes, classifying 24% of the total sample, were derived through cluster analyses of Jackson Personality Inventory profiles. A discriminant function analysis indicated that the two subgroups were significantly different on the basis of California Psychological Inventory scale scores. Interpretations of group modal profiles suggested that Type 1. individuals may be characterized as sociable; conforming, and restrictive in their social attitudes while individuals classified as Type 2 may be described as self confident, innovative, and rather flexible in their outlook. Comparisons were drawn between the present findings and research investigating personality characteristics among counsellor education students. The implications of the present résearch were discussed in terms of the relationship between personality subtypes and eventual field placement performance as well as theories relating personality and vocational choice. It was suggested that future research attempt to identify nontest correlates of these subtypes and to/explore the possibility of other modal personality profiles in different samples.

ACKNOWLEDGEMENTS

I wish to extend my appreciation to the members of my committee, Dr. C. Holland, Dr. M. Morf, and Prof. P. Taylor, for their assistance and guidance in the development of this research.

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CHAPTER I

Introduction

The identification of factors related to an individual's educational performance is an area of research that continues to attract the attention of both psychologists and educators. Intellective factors such as aptitude and achievement test scores, and grade point average are damong the most frequentry investigated in research aimed at predicting academic performance. However this area of research has produced inconsistent findings and dissatisfaction with these predictors is frequently expressed (e.g.: Omizo, Ward, & Michael, 1979; Willingham, 1974). As it has become increasingly clear that educational performance is not solely a function of intellectual factors, greater attention has been directed to the non-cognitive, or personality domain in the search for correlates of various performance criteria (Demichiell, 1973; Megargee, 1972; Murray & Walsh, 1976; Omizo et al., 1979).

The investigation of personality variables that relate to educational success is especially relevant for professional training in social and health service delivery. In the fields of social work and counsellor education, the

importance of considering personality variables rather than cognitive correlates of success is being increasingly recognized (Cope, 1982; Omizo et al., 1979). This makes sense when we consider that certain key skills identified by social work educators and used in student field placement evaluations, such as interviewing, counselling, and organizational skills, reflect important aspects of personality. Indeed, research on the correlates of empathy, a skill identified as critical in the field of social work (Keefe, 1980), suggests the irrelevance of intelligence and aptitude beyond a certain level for empathic understanding (Bergin & Solomon, 1963).

Despite recommendations that greater attention be paid to personality and non-intellective factors, very little research in the area of social work education has applied this approach. A somewhat larger body of personality research has emerged from the related field of counsellor education. These studies have generally examined the relationship between scores on single personality scales and ratings of either practica or academic performance among counsellor education students. For example, Wicas and Mahan (1966) compared high and low rated student counsellors on the Structured Objective Rorschach Test and found that high rated counsellors seemed more conforming and less persistent

whereas those rated low were more resistant to change but less anxious than the high rated counsellors. Using the California Psychological Inventory (CPI) as a measure of personality, Boland (1973) found that individuals presenting a moderate need to make a favourable impression were judged as more effective counsellors. Taylor (1976) also looked at CPI correlates of supervisor ratings of counsellor effectiveness and found that scores on the Dominance and Achievement via Conformance scales were significant predictors. In this same study, Dominance scores also correlated with counsellee ratings of change, as did Assertive scale scores. Multiple regression analyses using CPI scale scores to predict ratings of effectiveness and change were not significant. Comparing groups of counsellor trainees on the Omnibus Personality Inventory (OPI), Tinsley and Tinsley (1977) reported that relatively effective trainees were charactefized as being more introspective, esthetically sensitive, emotionally expressive, flexible, tolerant, and independent than the relatively ineffective counsellors. However, the groups did not differ significantly on eight of the fourteen OPI scales. in a study investigating personality correlates of academic rather than field placement success, Omizo et al. (1979) also obtained scattered significant correlations. These

authors concluded that psychological measures representing personality characteristics provide only limited potential as predictors of success in counsellor education. This general impression is not at odds with the conclusions reached by Rowe, Murphy, and DeCsipkes (1975). In their review of research published between 1960 and 1973 examining the relationship between counsellor characteristics and counselling effectiveness, they described the findings as generally disappointing and often contradictory.

In summary, although the relevance of studying personality characteristics among social work and counsellor education students is appreciated, research in this area has not been very prolific. The findings, often consisting of isolated correlations or group differences, are scattered and there is uncertainty regarding their meaningfulness or usefulness. It is evident that the existing research has largely proceeded from what Block and Ozer (1982) refer to as a variable centered, undifferentiated view of personality. That is, the correlates of abstracted dimensions are viewed separately and it is presumed that the information obtained from studying one group of individuals is the same as that derived from other groups.

In contrast to the undifferentiated approach to personality is the person centered, differentiated approach

patterns of personality scores and seeks the patterns of similarity or dissimilarity of behaviours among the population. Also known as the typological approach to personality, it is concerned with the unique configuration of a common set of variables within the person rather than with the relative position of individuals across variables (Bem, 1983). The typological approach seeks to uncover differences that may exist in the psychological relationships characterizing each of several groupings in such a way that between-type heterogeneity and within-type homogeneity are maximized (Block & Ozer, 1982). (See Appendix A for a brief review of typological concepts in the study of personality.)

Some researchers have attempted to identify personality subtypes on the basis of modal personality test profiles using, for instance, the CPI (e.g.: Burger & Cross, 1979; Lorr & Burger, 1981) and the Sixteen Personality Factors Questionnaire (e.g.: Burger & Kabacoff, 1982).

Multivariate clustering techniques have also been employed with personality test profiles to successfully delineate subgroups among clinical and occupational populations.

However, as noted by Block and Ozer (1982), in comparison to the undifferentiated approach, the typological approach has

not yet received frequent application in the field of personality. Indeed, one finds typological concepts largely missing from research investigating personality dimensions among students in different educational programs. In the area of social work and counsellor education, researchers have consistently adopted an undifferentiated approach to personality, and have generally relied on univariate statistical procedures.

Studying personality among social work students using a typological approach suggests several advantages. Not only might this area of research contribute to the literature on typological concepts in the field of personality in general, but if reliable and homogeneous personality subgroups could be delineated, this may provide important information for social work educators. Exploring personality subtypes among people choosing to pursue an education in social work is itself of heuristic value. Moreover, studying the relationship between personality subtypes and eventual success in different types of social work field placements could be of practical use in counselling students choosing among placement settings and areas of specialization. instance, if a particular personality subtype has been linked to success in a certain area of specialization and an individual's personality profile places him in this

subgroup, then providing him with this information may be useful in helping him select among placement settings. This possibility is especially appealing in light of the increasing numbers of students enrolling in social work programs.

Another area of application concerns admissions to social work programs. Interviews for personal suitability and personal references are typically included as important steps in the admission process. If certain clusters of personality dimensions that are linked to desirable performance criteria could be identified, it may be useful to focus on these aspects of personality when assessing an applicant's suitability during these two admission procedures.

The aim of the present research was to apply a typological approach to the study of personality among first year social work students at the University of Windsor in an attempt to identify and describe personality subgroups.

More specifically, the main purposes of this study were:

(a) to identify personality subtypes by means of cluster analysis performed on Jackson Personality Inventory (JPI) scales (Jackson, 1976).

- (b) to test statistically the differences between identified personality subtypes on the basis of independent personality data, and
- (c) to identify demographic and background variables associated with the personality subtypes obtained.

The present study constitutes the initial step in a larger research effort aimed at the eventual prediction of field placement performance. As noted by Block and Ozer (1982), the establishment of a psychological data base of sufficient quality and in a suitable form is a necessary first step before serious tests of the potential of the typological approach can be made.

Me thod

Subjects

One hundred and forty four first year students in the School of Social Work at the University of Windsor were asked to participate in the study.

Materials

Jackson Personality Inventory (JPI)

personality measure (Jackson, 1976) described as particularly appropriate for use in universities as an aid to counselling, as well as for personality research.

University of Windsor students were part of the normative sample used in the development of this test, further contributing to the suitability of the JPI for the present study. This measure is designed to reflect various interpersonal, cognitive, and value orientations that are presumably relevant to the prediction of behaviour in a variety of settings. It consists of 320 true/false statements comprising one validity and fifteen content scales. Scales are designed to be bipolar, and are composed of ten true-keyed and ten false-keyed items. A description

of each scale is given in Appendix B. Internal consistency reliability estimates have been obtained on two samples of college students and ranged from .84 to .95 in the first sample and .75 to .93 in the second sample (Jackson, 1977).

California Psychological Inventory (CPI)

The CPI, developed by Gough (1957), is a widely used self administered personality measure intended to assess dimensions of personality relevant to everyday personal and social functioning. It contains 468 statements, twelve of which appear twice for a total of 480 items. Content is geared to students and young adults, and consists mainly of reports of typical behaviour patterns and customary feelings, opinions, and attitudes about social, ethical, and family matters (Megargee, 1972). The CPI is typically scored for 18 scales that Gough has divided into four classes to facilitate profile interpretation (see Appendix C). Fifteen scales are designed as measures of personality traits and three are validity scales also having interpretive significance. Test-retest reliability coefficients range from .71 to .90 over the short-term (1-4 weeks) and .60 to .70 over a longer term (one year) (Megargee, 1972). Measures of internal consistency vary. Based on a sample of college students and using a split-half technique, Gough reported reliability coefficients rangingfrom .62 to .87. Megargee (1972) reports coefficients
ranging from .22 to .94 using a Kuder-Richardson 21
technique and high school norms.

Many studies in a variety of settings have demonstrated the usefulness of the CPI in predicting academic achievement, as well as in military and police training programs, medicine, dentistry, nursing and teaching. Scores on CPI scales have also been related to leadership, managerial ability, employability, and adjustment. (The reader is referred to Megargee (1972) for a full review of this research.)

Since it is such a widely used and well validated instrument, the CPI was selected in the present study to extend the analysis and description of personality subtypes. A supplementary CPI scale used in the present study was the Empathy scale, empirically derived by Hogan (1969). It consists of thirty one CPI items and has been shown to have satisfactory construct validity (Grief & Hogan, 1973). These authors suggest the usefulness of this scale in exploring correlates of counsellor effectiveness.

Procedure

Students were asked to complete the JPI and CPI as part of a collaborative research effort between the Departments of Psychology and Social Work. Each measure took approximately fifty minutes to domplete. The JPI was administered during class time and upon its completion, students were asked to fill out and return the CPI within the next few days. The purpose of the research was explained as examining common personality subtypes or groups among incoming social work students. Participation was voluntary and students were assured that the data would be coded to preserve student anonymity. It was emphasized that test results would not be analysed on an individual basis but rather that group personality profiles were being sought. Demographic and other background information collected at the time of testing included age, sex, marital status, native language, number of years in Canada, educational degree ultimately sought, intention to continue in the social work program, and intention to pursue a career in social work.

CHAPTER III

Results

Raw scores on the JPI scales were converted to T scores. The means and standard deviations of the fifteen substantive JPI scales for the total sample of 144 subjects are presented in Table 1. Table 2 provides background and demographic information on the total sample. Due to the small number of males (n=20) and the fact, that they did not differ significantly from the females on any of the JPI scales, analyses were performed on data from both sexes combined. There were also no significant differences found in JPI scale scores between groups differentiated on any of the other background or demographic variables.

As seen in Figure 1, the JPI profile for the total sample was relatively flat, with scale scores hovering around the mean (T=50). The one slight elevation was on the Value Orthodoxy scale (T=57), suggesting that on the average, the sample of social work students tends to value traditional customs and beliefs, and may be resistant to change in social customs.

TABLE 1

T Scores on Jackson Personal ity Inventory Scales for the Total Sample

	N=144			
JPI Scale.	<u>x</u>	<u>SD</u>		
Anx i e t'y	51.65	9.02		
Breadth of Interest	47.16	9.99		
Complexity	46.72	8.88		
Conformity	49.26	10.36		
Energy Level	48.6%	9.44		
Innovation	50.85	8.14		
Interpersonal Affect	54.09	7.35		
Organization	49.88	8.60		
Responsibility	51.92	8.36		
Risk Taking	48.46	8.73		
Self Esteem	51.42	8.31		
Social Adroitness	52.79	9.57		
Social Participation	52.33	9.25		
Tolerance	50.65	9.66		
Value Orthodoxy	56.94	7.24		

TABLE 2

Description of Background and Demographic Information for . the Total Sample

	×	<u>so</u>	٠
Age	22.81	6.44	
4	Ñ	<u>%</u>	
Sex males females	20 124	14 86	•
Marital Status single married other	121 7 16	84 5 11	
Native Language English other	134 10	93 7	
Years in Canada born 1-9 yrs. 10 or more	118 6 20	82 4 14	
Degree Spught BA / BSW MA / MSW Ph.D. undecided	76 60 2 6	53 42 1 4	
Intention to Continue in Social Work Program yes no undecided	9 124 18 2	86 12 1	•
Intention to Pursue a Career in Social Work yes no undecided	123 17 4	85 12 3	

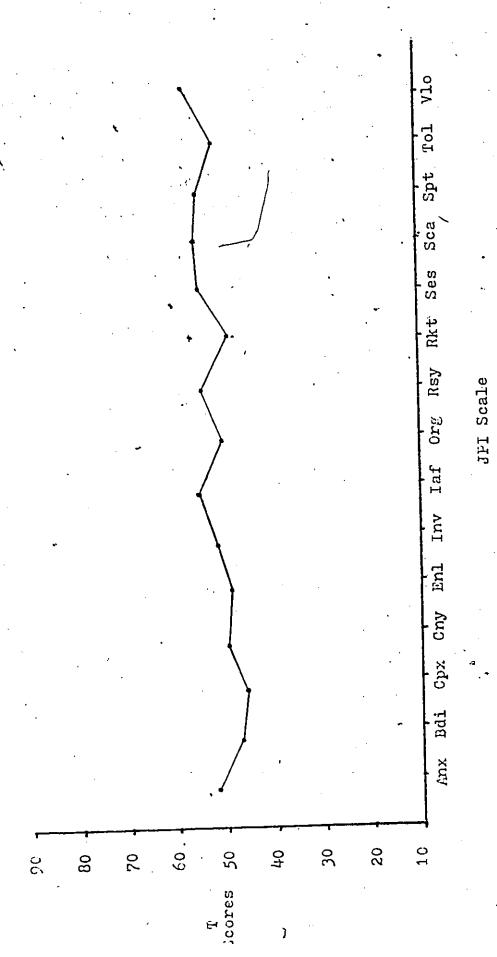


Fig.1. JPI profile for total sample.

Cluster Analyses of JPI Scales

A cluster analysis was performed on 144 profiles composed of T scores on the fifteen substantive JPI scales. The BMDP2M Cluster Analysis on Cases program (Engelman, 1983) was used. In this procedure, the two cases having the shortest Euclidean distance between them are clustered and considered as one case. The single linkage algorithm employed assigns cases to clusters that have members closest to the case and continues until all cases are combined (amalgamated) into one cluster. There was a total of 144 steps, and at each step, an amalgamation distance coefficient, a measure of Euclidean distance between the cases in the cluster, was provided. Amalgamation distances increased at fairly regular intervals across steps, and ranged from 18.25, the initial distance between the two closest cases, and 40.93 at the final step.

Determining the number of clusters present in the data can be difficult, and as Everitt (1981) points out, no completely satisfactory solution exists. When hierarchical techniques are employed, he suggests that an examination of the dendrogram may be useful in identifying clusters.

Visual inspection of the dendrogram led to the identification of two distinct clusters at an amalgamation

distance level of 24.94 (step 45 in the algorithm). This was chosen as a cutoff point since subsequent steps mainly incorporated individual subjects into the two clusters rather than clusters containing two or more subjects. It was judged that the number of subjects that would be classified by the inclusion of a few more algorithmic steps was too low to warrant the increase in amalgamation distance and the corresponding decrease in within-cluster homogeneity.

The largest amalgamation distance or cutoff point for Cluster 1 was actually lower (23.64). No additional cases were incorporated into this cluster during the next eleven steps of the algorithm, at which point the amalgamation distance level had increased to 24.94 and Cluster 2 was more clearly defined. In fact, Cluster 1 remained unchanged for a further six steps, during which no additional cases were included. However, in order to maintain consistency across the two clusters with respect to the algorithmic procedure, an amalgamation distance cutoff point of 24.94 is reported.

The two clusters together classified 24% (n=35) of the total sample and consisted of 13 and 22 subjects respectively.

The importance of evaluating the stability and usefulness of a cluster analytic solution is often

emphasized (e.g.: Blashfield, 1980; Everitt, 1981). Everitt proposed replicating a solution across different cluster analytic methods as one procedure useful in evaluating a solution.

Accordingly, a second hierarchical procedure, the SAS clustering program Cluster (SAS Institute, 1982), was also applied to the JPI data for the total sample. The algorithm used to compute the distance between clusters in this analysis was Ward's method. According to this procedure, the distance between two clusters is calculated as the sum oof squares between the two clusters added up over all the variables. At each step in the analysis, union of every possible pair of clusters is considered and the two clusters whose union produces the minimum increase in the error sum of squares are combined (Everitt, 1981).

An examination of the dendrogram led to the identification of five clusters. Two of these clusters, containing 7 and 19 subjects respectively, showed considerable overlap (71% and 74%) with the two clusters identified in the initial cluster analysis. Thus, this provides some support for the validity of the original cluster analytic solution.

Table 3 presents the means and standard deviations of the JPI scale scores for the clusters. Also shown in Table

5

TABLE 3

Means and Standard Deviations of Jackson Personality Inventory Scale Scores for Subjects Classified into Clusters

	Cluster 1 (n=13).		Clusto (n=2)			
JPI Scale	×	<u>SD</u>	X	<u>SD</u>	Univariat F(1,33)	e
Anxiety	56.54	5.06	46.95	5.99	23.36	***
Breadth of Interest	38.54	7.26	54.73	7.30	40.30	***
Complexity	39.23	4.92	49.86	5.53	32.68	***
Conformity	58.00	6.19	44.23	7.92	28.77	***
Energy Level	44.31	6.70	49.14	5.93	4.92	*
Innovation	45.31	6.76	54.45	3.95	25.75	***
Interpersonal Affect	55.85	3.65	51.86	5.14	5.99	*
Organization	47.85	6.26	50.91	7.36		٠.
Responsibility	51.62	6.45	54.82	5.18		
Risk Taking	47.23	6.19	49.18	7.87		
Self Esteem	43.38	8.67	55.27	5.68	24.13	***
Social Adroitness	51.85	8.44	50.32	5.18		
Social Participation	60.69	4.09	51.05	7.35	18.79	***
Tolerance	46.92	4.75	53.41	4.89	14.69	**
Value Orthodoxy	60.08	5.47	57.68	6.83		

^{*} p4.05 ** p4.0005 *** p4.0001

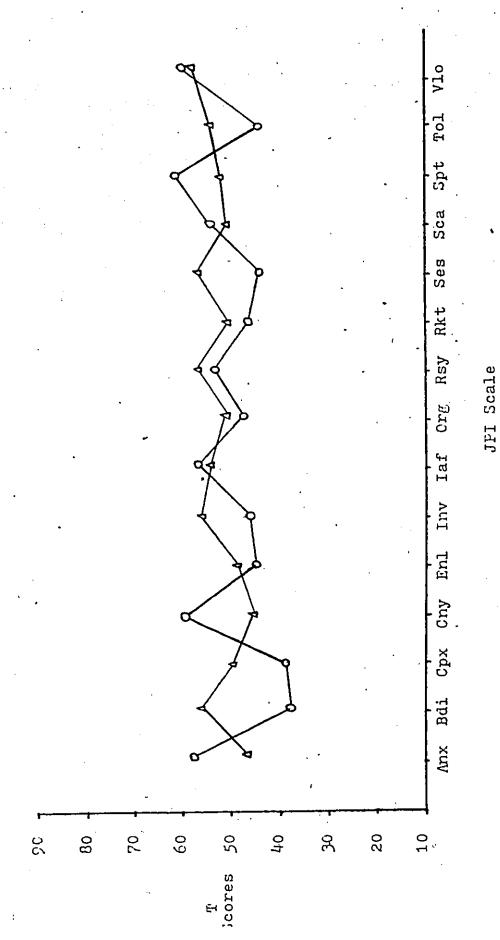


Fig. 2.. JPI profiles of personality subtypes.

3 are the F ratios for the univariate tests of significance between scale means for the two clusters. Eleven of the fifteen scales showed significant differences between groups, providing some indication of the success of the grouping procedure in identifying differences within the social work student sample. Figure 2 presents the modal JPI profiles for the two clusters.

Analyses of Background and Demographic Variables

Chi square analyses were used to determine the relationship between subgroup classification and categorical background and demographic variables. No significant differences were found with respect to sex, marital status, native language, number of years in Canada, educational degree ultimately sought, intention to continue in the social work program, and intention to pursue a career in social work. There was a significant difference between the two subgroups in age, as revealed by a one way analysis of wariance, F(1,33)=9.22, p < .005. Subjects in Cluster 2 (mean age - 25.91 years) were significantly older than subjects in Cluster 1 (mean age - 19.23 years). To ensure that any differences found between the subgroups were not mainly a function of age, analyses comparing subgroups on

personality scale scores were repeated using age as a covariate. Overall, this did not appreciably alter the findings.

Discriminant Analysis of Clusters

In addition to replicating a cluster analytic solution across different cluster analytic methods, Everitt (1981) also suggests that comparing clusters on variables independent of the original analysis provides a second way of evaluating the usefulness of the solution. Following this suggestion, subgroups were compared on the basis of CPI scale scores. It should be noted that failure to complete and return the CPI resulted in missing data for some subjects. The percentage of subjects with complete data (i.e.: both JPI and CPI) was 54% in Cluster 1 and 77% in Cluster 2. Therefore, interpretations made on the basis of analyses using the CPI should be regarded as tentative.

Table 4 presents the means and standard deviations of the CPI scales for both clusters, and F ratios derived from one way analyses of variance. There were significant differences between the two subgroups on ten of the eighteen scales, as well as on the Empathy scale, a supplementary CPI

TABLE 4

Means and Standard Deviations of California Psychological Inventory Scale Scores for Subjects Clustered According to JPI Scale Scores

	Cluster i (n=7)		Clusto (n=1)			
•					Univaria	
	X	<u>SD</u>	×	<u>SD</u>	F(1,22)
CPI Scale						
Dominance	39.71	8.38	56.47	9.48	16.47	
Capacity for Status	27.29	13.97	45.82	10.66	12.55	
Sociability	44.86		51.35	7.73		
Social Presence	45.43	4.83	57.24	7.84	13.54	
Self Acceptance	46.86	11.50	57.24	9.14	5.52	*
Sense of Well Being	31.00	10.17	40.29	13.48		
Responsibility∳	35.71	8.42	44.06	7.68	5.46	*
Socialization	43.29	ii .63	41.94	8.59	•	
Self Control	38.43	8.04	37.65	11.24		
Tolerance	27.00	12.17	47.06	10.62	16.29	**
Good Impression.	36.00	8.54	41.06	6.69		
Communality	53.86	4.34	49.00	8.39	•	
Achievement via		•				
Conformance	37.29	8.60	45.41	11.03	•	
Achievement via		•	. •			
Independence	37.14	10.24	53.24	9.02	14.64	**
Intellectual						
Efficiency	31.14	9.53	45.47	10.51	9.38	**
Psychological-		•	•			
Mindedness	43.71	6.13	51.82	8.05	5.69	*
Flexibility	46.14	8.97	52.65	10.77		
Femininity	51.29	7.32	49.82	7.15	•	
•						
Empathy (raw score)	15.71	2.50	19.12	4.00	4.31	*

ρ ζ .05 p ζ .005

p4.0005

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Fig. 3. CPI profiles of subtypes clustered according to JPI scale scores.

scale. The modal CPI profiles for groups clustered according to JPI scale scores are presented in Figure 3.

A direct discriminant function analysis was performed using CPI scale scores and age as predictors of subgroup membership. With only two groups to be discriminated, one significant discriminant function was calculated (F(7,16)=12.98, p 4.001). Seven variables emerged as significant contributors to the differentiation between subgroups (age, Dominance, Capacity for Status, Sociability, Socialization, Self Control, and Tolerance).

To classify cases into groups, a classification equation was computed for each group. Each case had a classification score for each group and was assigned to the group for which it had the highest classification score. In the present study, a jacknife classification procedure was used. It reduces bias by classifying each case on the basis of equations developed from all data except the case being classified. Based on this procedure, 96% of the subjects were correctly classified.

As shown in Table 5, the loading matrix of correlations between the predictor variables and the discriminant function indicates that the primary predictors in distinguishing between groups were scores on the Dominance, Tolerance, and Capacity for Status scales. The direction of

Results of Discriminant Function Analysis of CPI Scale Scores

with Discriminant	
Function	A //
, <u> </u>	
Age .15	4.66
Dominance .27	16.47
Capacity for Status .24	12.55
Sociability .13	4.01
Social Presence .25	13.54
Self Acceptance .16	5.52
Sense of Well Being 11	2.67
Responsibility .16	5.46
Socialization02	.98
Self Control01	.28
Tolerance .27	16.29
Good Impression .10	2.42
Communality10	2.07
Achievement via Conformance .14	3.01
Achievement via Independence .26	14.64
Intellectual Efficiency .21	9.68
Psychological-Mindedness .16	5,69
Flexibility .09	1.97
Femininity03	,20
Empathy .14	4.31
Canonical R .95	•
Eigenvalue 10.04	

the contribution of the above mentioned scales was inferred from the group means. Individuals in Cluster 1 appeared lower on these three CPI scales.

Description of Clusters

Cluster descriptions have been primarily based on JPI modal profiles derived for each group. The two subtypes were also compared on the basis of CPI scale scores found to significantly discriminate between groups.

Type 1 (n=13)

Type 1 represents a sociable, outgoing person who values positive interpersonal relationships and will eagerly become involved in various social groups. Others may view these individuals as goodnatured and cooperative. There may be a tendency for this type to be overly accommodating and susceptible to group pressure, as well as prone to worrying. Traditional customs and beliefs seem to be valued by these individuals and they may react to changes in social customs with inflexibility and opposition. Individuals in this group do not seem particularly curious or eager to pursue new areas of interest, and appear to prefer uncomplicated concrete thought to abstract contemplation.

Compared to Type 2, individuals classified as Type 1 may be described as conventional and distrustful in personal and social outlook. They seem to lack confidence and may experience feelings of awkwardness and uneasiness in new situations.

Type 2 (n=22)

Type 2 represents a self confident, responsible, composed individual who is rather individualistic in thought and action. This type also seems to value traditional customs and beliefs, and believes in dealing with others in an honest, ethical manner; Individuals in this group are likely to exhibit a creative and innovative problem solving style, and appear to be interested in exploring new ideas and learning about new things.

Type 2 individuals differ from those classified as Type 1 in that they appear to be more self reliant and resourceful. As well, they seem to be generally more tolerant and to have developed a wider range of personal interests.

CHAPTER IV

Discussion

The results of the present study indicate that as a group, incoming social work students at the University of Windsor appear comparable to college students in terms of the personality dimensions measured by the JPI with the exception of one scale." An elevated group mean on the Value Orthodoxy scale suggests that these students may be conventional and conservative in their social outlook and may be resistant to change in social customs. Due to the paucity of research examining personality characteristics among social work students, it is difficult to ascertain whether this aspect of personality is commonly found among social work students or if it is unique to the present sample of Univeristy of Windsor students. However, for the purposes of the present study, it may be more worthwhile to consider how this personality characteristic relates to other aspects of personality, rather than to interpret it in isolation. This issue will be discussed further in the context of the subgroup personality descriptions.

The two subtypes of social work students derived through cluster analysis classified 24% of the total sample. While this figure is somewhat low, the types isolated seem

homogeneous and well differentiated on independent -personality variables, and may be considered "core types" in
the study of personality among social work students.

Moreover, the group profiles are interpretable and this is a
desirable feature if such personality profiles are to have
any validity other than statistical (Burger & Cross, 1979).

Based on the subgroup modal JPI profiles, individuals classified as Type 1 can generally be described as outgoing, accomodating, conforming, and somewhat anxious. They tend to be fairly restrictive both in their social outlook and in their scope of interests. Type 2 individuals on the average were older than individuals classified as Type 1. They may be described as self confident, conscientious, innovative, and interested in exploring new ideas. The discriminant analysis of the two groups on the basis of the CPI scale scores indicated that the personality dimensions of dominance, tolerance, and capacity for status contributed to the overall significant difference in personality structure between the two subtypes. Type 1 individuals appeared to be lower on these three dimensions.

Thus, it appears that while both groups scored relatively high on the JPI Value Orthodoxy scale, reflecting an emphasis on traditional customs and beliefs, a more flexible and tolerant attitude among Type 2 individuals may

mitigate against the expression of rigid and judgmental attitudes when dealing with people who are not socially conventional. On the other hand, Type 1 individuals, appearing rather inflexible and distrustful, may find it difficult to tolerate nonconformist attitudes.

As noted earlier, personality research in the field of social work education is extremely sparse. However, it is possible to make some tentative connections between the present findings and the research literature exploring personality characteristics among counsellor education students. It is important to emphasize, though, that because different methodological approaches, different personality measures, and different populations of students have been used, any hypotheses formed on the basis of cross study comparisons should be regarded as extremely speculative.

In the study by Tinsley and Tinsley (1977) mentioned earlier, relatively effective counsellor trainees were described as reflective, imaginative, and independent individuals who exhibited a diverse range of interests. They tended to be less judgemental than relatively ineffective trainees and more tolerant of others' viewpoints. This personality description is quite similar to that of Type 2 individuals in the present study,

profiles that correlate highly with the Type 2 modal profile may be evaluated quite positively in their field placements.

A different set of personality descriptors forhigh-rated student counsellors was reported by Wicas and
Mahan (1966). In their study, high rated counsellors seemed
more conforming than low rated counsellors and the latter
were described as less anxious. In the present study, Type
1 individuals were characterized as somewhat conforming and
anxious, suggesting that this subgroup may also perform well
in their field placements.

Although the findings from these two studies appear contradictory in terms of associating different personality characteristics with high practicum ratings, it is possible that different personality characteristics may relate to different aspects of successful performance. Thus, we may speculate that the two subtypes identified in the present study may each be relatively successful in different areas of specialization. Indeed, this is exactly the type of question that may be ultimately addressed on the basis of the present findings. If there is a relationship between different personality subtypes and performance in various kinds of field placements, this information is of potential practical value in helping students choose among placement

settings. This is certainly an area of research deserving of further attention.

The present research also raises the issue of vocational choice; specifically, the question concerning the type of individuals who choose to pursue an education insocial work. Theories of career development often relate vocational choice to personality in some way (Holland, 1973; Osipow, 1973) and, in fact, Holland, a major theorist in this area, discusses vocational choice in terms of personality types. He has developed a theory that proposes that individuals tend to gravitate toward occupations compatible with their personality. According to Holland, most people in our society can be categorized as one of six types: Realistic, Investigative, Social, Conventional, Enterprising, or Artistic. Although these six types are rarely present in a pure form and most people possess aspects of all six, Holland suggests that an individual's behaviour will reflect one or two of these styles more strongly than the others and this will be reflected in his vocational choice. Of particular relevance to the present research is the Social type since social work is presented as a career or college major that is representative of this type. The Social type is described as cooperative, sociable, and insightful. Individuals fitting into this

classification enjoy helping others and act in a responsible, understanding manner. This type values social and ethical activities and problems and is attracted to occupational environments that involve interpersonal rather than intellectual or physical activities (Holland, 1973).

There are certain similarities between the Social type presented by Holland and both personality subtypes identified in the present study. Type 1 is characterized as sociable, outgoing, and cooperative while Type 2 may be seen as responsible and wanting to deal with others in an honest, ethical manner. However, it is noteworthy that in the present study these two sets of personality characteristics were not strongly associated with each other. This suggests that it may be more meaningful to conceive of social work students in terms of personality subtypes rather than as belonging to a more global category such as a Social type.

Follow-up research based on the present findings may have important implications for theories relating personality characteristics and vocational choice. The present sample of students were in their first year of the social work program and some of them may decide to switch majors. Of those who complete the program, perhaps only a proportion will eventually practice in the field of social work. At this first year level, it appears that two rather

distinct personality types are attracted to the study of social work. It will be interesting to examine whether there is any relationship between personality subtype and variables such as program completion and eventual pursuit of a social work career. Although intention to continue in the program and to seek a career in social work were both assessed in the present study and subgroups were not found to differ on these variables, it is likely that this was too early a point in the educational process to obtain reliable answers to these questions. It is conceivable that the subset of students who eventually practice in the social work profession are a more homogeneous group, a finding that would be more consistent with Holland's theory of personality types and vocational choice.

A final note concerns findings based on the CPI Empathy scale. While scores on this scale did not enter into the discriminant function that differentiated personality subgroups, there was a significant difference between the two groups on this scale, with Type 2 individuals receiving higher empathy scores. Empathic ability is considered an important facilitator in the development of interpersonal relationships and, indeed, has been described by G.H. Mead (1934) as the very essence of social intelligence. Thus, it was not surprising that Type 2 individuals, who seemed

generally more socially competent than Type 1 individuals in the sense of being more self confident, tolerant, resourceful, and comfortable in social situations, received higher scores on the Empathy scale. Since empathic ability is recognised as a critical skill in the field of social work (Keefe, 1980), we may speculate that greater empathy on the part of Type 2 individuals may contribute to them becoming more effective social workers. However, given that this study was conducted on first year students and that social work training may heighten interpersonal sensitivity, this may be a premature conclusion. In fact, an interesting line of research that is prompted by this discussion is the study of changes in empathy scores within the two subgroups as they proceed through the program. This may provide useful information for social work educators concerning the relationship between personality characteristics such as empathic ability and the educational process.

In summary, the results of the present study are generally supportive of distinct personalilty subtypes among social work students on the basis of personality dimensions measured by the JPI. Furthermore, the pattern of differences over the CPI scales reinforced many aspects of the subtype interpretations. While no conclusions may be reached regarding the predictive potential of these

personality subtypes (and this may be the ultimate test of the usefulness of the typological approach), the identification of two core types has raised a number of interesting issues and ideas for future research. Briefly, these include exploring nontest correlates of these subtypes, such as performance in various kinds of social work field placements and areas of specialization, changes in particular aspects of personality such as empathy, and vocational development. Because there is practically no previous research exploring personality among social work students, this study may be considered very exploratory and the possibility that other modal profiles could be identifed in other samples should certainly be investigated. Based on the present findings, there is reason to believe that this is a fruitful area of study for both social work educators and psycholgists interested in typological research.

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APPENDIX A

Overview of the Typological Approach in Personality Research

Typological concepts and the notion of personality types have been around for some time and were once quite prevalent in psychological theory. However, as described by Bolz (1977), interest in typological theories of personality began to decline primarily because of their scientific inadequacy and misuse. These personality schemes had been overambitously extended in attempts at global coverage, and oversimplified in order to cover the diversity of human behaviour. In addition, many of these schemes lacked a sound empirical foundation. Bolz maintains, however, that the reduced interest in personality typologies was due to problems with the particular typologies derived and not any reflection of weakness of the concept itself.

In recent years, typological concepts in personality have received more favourable recognition from a theoretical as well as a research perspective. In his description of the likely attributes of a successful interactional theory of personality (that is, one that interrelates classes of persons, behaviours, and situations), Bem (1983) suggests that it is likely to be morphogenic, or person centered,

while still assuming nomothetically that there exists a common set of descriptors for all persons. Bem notes that this approach explicitly produces a typology of persons. From a research perspective, it is clear that the idea of reducing variation among individuals to a smaller number of personality patterns is certainly appealing and potentially very useful. Not only does it make efficient use of information, but if nontest correlates of types could be identified, this approach might contribute both to the prediction of certain behaviours or outcomes as well as to theoretical advances in personality research (Bolz, 1977; Burger & Cross, 1979).

Two factors that contribute to the strength of the typological approach may be identified. First, identifying personality subtypes on the basis of score profiles and modal patterns is consistent with the configural approach commonly recommended in personality test interpretation. If we are focusing on patterns of scores for interpretive reasons, then it makes sense, as Burger and Cross (1979) suggest, to look for and develop indices that capture major score patterns. This goal is related to the second factor, that is, the congruence between the typological approach and the theory of cluster analysis. Bolz (1977) notes the resurgence of interest in cluster analysis in recent years

difficulties in measuring similarities and locating types. He suggests that cluster analysis is the method of choice for identifying homogeneous and distinct personality subgroups on the basis of profile similarity and, in fact, considers the development of cluster analytic theory critical to the development of typological theory. Thus, the consistency between typological goals and both profile interpretation and statistical procedure reflects favourably on the typological approach and provides support for its use in applied research.

APPENDIX B

Jackson Personality-Inventory Scales

Anxiety

Breadth of Interest

Complexity

Conformity

Energy Level

Innovation

Interpersonal Affect

Organization

Responsibility

Risk Taking

Self Esteem

Social Adroitness

Social Participation

Tolerance

Value Orthodoxy

Infrequency

APPENDIX C

California Psychological Inventory Scales

Class I Scales (measures of poise, ascendancy, self assurance, and interpersonal adequacy)

Dominance (Do)

Capacity for Status (Cs)

Sociability (Sy)

Social Presence (Sp)

Self Acceptance (Sa)

Sense of Well Being (Wb)

Class II Scales (measures of responsibility, socialization, maturity, and interpersonal structuring of values)

Responsibility (Re)

Socialization (So)

Self Control (Sc)

Tolerance (To)

Good Impression (Gi)

Communality (Cm)

Class III Scales (measures of intellectual efficiency and achievement potential)

Achievement via Conformance (Ac)

Achievement via Independence (Ai)

Intellectual Efficiency (Ie)

Class IV Scales (measures of intellectual and interest modes)

Psychological Mindedness (Py)

Flexibility (Fx)

Femininity (Fe)