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Abstract

Recent structural analyses of the widely used FIRO-B interpersonal personality measure identify a two dimensional model (Control and Social-Affect) rather than Schutz’s three dimensions of Control, Openness and Inclusion. The present study re-examined the FIRO model across the 54 individual items as reported by 89 adults. The results support a modified FIRO model of interpersonal personality in which Inclusion and Openness are part of the same substantive domain (Social Engagement), distinct from Control, but reflect different Generative and Accepted Modes of interaction. Importantly, however the analysis (SSA-I) reveals a subset of Schutz’s original Openness items that capture a third substantive component of the interpersonal domain, Social Withdrawal. This negative interpersonal tendency has not been identified previously within the FIRO or other interpersonal personality models.

Keywords: interpersonal personality, firo theory, facet modelling, social withdrawal

Introduction

The FIRO-B (Schutz, 1958) is a widely adopted assessment tool for interpersonal personality particularly in clinical contexts yielding scores on three dimensions of Control, Openness (Affection) and Inclusion. Profiles across these dimensions are used to identify 27 clinical types in terms of a client’s interpersonal style in close personal and/or small (work) group relationships (Ryan, 1977). Researchers have related scores on the dimensions to alcohol abuse (Turner & Mayr, 1990), offending style (Youngs, 2004), Machiavellianism (Macrosson & Semple, 2001), lifestyle preferences (Floyd, 1988) and intimate partner abuse (Poorman & Seelau, 2001) FIRO-B scores have also been related to clinical treatment programme success (Lee, 1996).

However, a number of recent studies have questioned the construct validity of the FIRO, especially with regard to the distinctness of Schutz’s Affection (Openness) and Inclusion components (Dancer & Woods, 2006; Furnham, 2008; Hurley, 1992; Macrosson, 2000; Mahoney & Stasson, 2005). Mahoney and Stasson, for example, report correlations of $r = .65$ between Expressed Inclusion and Expressed Affection, leading them to conclude that two dimensions of Dominance (Control) and Socio-Emotional Affect (Inclusion and Affection) underpin the FIRO-B. Examining ten FIRO-B inter-correlation matrices, Macrosson (2000) concurs with this conclusion, labelling the two factors he identifies as Control and Nurturance. More recently, Furnham (2008) similarly reports a two rather
than three factor solution; a structure supported by the pattern of correlations he reports with The Big Five intrapersonal personality measure (Costa & McCrae, 1992).

In assessing the construct validity of the FIRO, these studies all accept Schutz’s basic dimensions of interpersonal personality, seeking to show whether these dimensions are independent. Yet given that some degree of overlap has been reported between these dimensions (e.g. Furnham, 2008; Hurley, 1992; Macrosson, 2000), the indications are that a more detailed consideration of the relationships between the individual items themselves may be instructive. Schutz provided a special coding framework in relation to the scoring of each item on each dimension allowing those administering the questionnaire to give clients a total score on each of the dimensions; however, there are no published accounts of the psychometric basis for the coding framework. In exploring the structure of the FIRO interpersonal framework, a thorough examination of the interrelationships between the individual items and using the raw scores is required.

Further, the existing studies all focus on the original FIRO-B (1958) but in 1992 Schutz clarified the theoretical underpinnings of the FIRO model, proposing an elaborated set of concepts to measure the different facets of social interaction that he argued are necessary to understand inter- (as opposed to intra-) personal personality (Element-B; Schutz, 1992). The validity of this new Element B structure and in particular its implications for the validity of the three proposed distinct substantive dimensions, Control, Openness (formerly Affection) and Inclusion has not been explored.

Yet despite the fact that Schutz (1992) proposed the Element B with its theoretical developments, to replace the FIRO-B, and that the idiosyncratic coding framework for the individual items has not been established psychometrically, there continue to be studies that explore the structure of interpersonal personality, relying on the subscale total scores from the original FIRO-B (Schutz, 1958). The question therefore arises as to what the psychometric structure of the Element B consists of when derived from the raw scores and is based on the individual items.

One of the unique strengths of Schutz’s model, as he makes clear in his early writings, is that it has a facet structure, drawing on Guttman’s Facet Theory (Guttman, 1954). As Guttman and his followers over the last 50 years have demonstrated in many studies across diverse domains, notably intelligence (Guttman, 1965; Guttman & Levy, 1991) and criminal action (Canter & Heritage, 1990), such structures are most appropriately explored using methodologies that make no assumptions about the underlying structure of phenomena. A more cognate way of testing the construct validity of Element B then would be to use Smallest Space Analysis (SSA-I).

To explore the structure of interpersonal personality within a FIRO theory framework, a study was therefore conducted that:

a) **Drew on the Element B clarification of the Facets of Interaction**

As noted, in developing the Element B, Schutz elaborated and clarified the range of components of an individual’s interpersonal tendencies and the needs required (unclear) to describe interpersonal personality (see Table A1). For each of the 3 substantive domains of Control, Openness (formerly Affection) and Inclusion, he proposed that an individual’s interpersonal personality was comprised of Expressed and Received tendencies and for each of these Wanted and Actual/Perceived facets could be distinguished. The Element B therefore disentangles the Wanted and Received components that were mixed together in the first ‘I want people to control me’, ‘I want to be included’ and ‘I want people to get close and personal with me’ FIRO scales.
As a first step, the present study draws on the Actual facets of interpersonal tendency allowing a focus on the behavioural components of individuals’ interactions. These will be the components central to defining personality in the inter- as distinct from intra-personal domain.

b) Examined the structure of the individual FIRO items, using raw scores

By examining relationships between total scale scores only, previous studies have not considered potentially important differences reflected by the individual items. There is no evidence that the nine items comprising each of the scales measure a single construct only, without meaningful qualitative variation. Similarly, there is no evidence regarding the quantitative contribution each item makes to the total scale score implied by the differential scoring of items within Schutz’s coding framework. As such, in exploring the structure of the Element B, the present study examines the interrelationships among the 54 individual items, deriving the inter-relational structure from the common six-point raw responses to the items.

c) Using a Facet Approach to structure delineation

Schutz’s reliance on a facet structure basis to the FIRO reflected his awareness of the different components (or facets) of an individual’s interactions that were relevant to understanding his/her characteristic tendency with the interpersonal domain. The facet approach allows exploration of structures within which each aspect or item can reflect multiple conceptual components of the domain, rather than a single construct (or factor). Previous studies exploring the FIRO structure have assumed that the different components are organised as distinct dimensions or factors, examining only the correlations between, for example, between an Expressed Control and an Expressed Inclusion factor. Yet it seems unlikely that human tendencies take the form of sharply demarcated dimensions.

To understand how the different components of interpersonal tendency that Schutz advocates interact requires an approach which makes no assumptions about the underlying structure of human behaviour and phenomena, and therefore allows for systemic models, where particular tendencies can emerge, as the product of interactions between conceptual constructs (or facets).

Method

Participants

There were eighty-nine respondents, of whom thirty-nine were males (44%) and fifty females (56%). The participants were young, having a mean age of 21, ranging from 16-28 years. The sample was highly educated being drawn from an undergraduate British University and was predominantly comprised of Caucasian/White participants (n = 75) with Asian and Black African groups also represented.

Materials

The revised version of the FIRO-B (Fundamental Interpersonal Relations Orientation—Behaviour; Schutz, 1958) was given to participants to fill out based on their personal perceptions. The questionnaire measures interpersonal tendencies, assessing a person’s characteristic behaviour towards other people along three dimensions: Inclusion, Control and Openness. The full Element B questionnaire measures four aspects of these three dimensions: Expressed behaviour and Received behaviour in relation to Actual behaviour; and Expressed behaviour and Received behaviour in relation to Wanted behaviour.
In this way, Schutz differentiates between interpersonal needs (Wanted behaviour) and interpersonal tendencies (Actual behaviour). In the present study the Expressed and Received aspects of the Actual behaviour only were measured. As such, scores were calculated (see Schutz, 1987 for details) for six dimensions:

1. ‘I control people’ (Expressed Control)
2. ‘People control me’ (Received Control)
3. ‘I am open with people’ (Expressed Openness)
4. ‘People are open with me’ (Received Openness)
5. ‘I include people’ (Expressed Inclusion)
6. ‘People include me’ (Received Inclusion)

There are nine items for each scale, giving a 54 item questionnaire. Each item is answered on a six point Likert-type scale that ranges from agree to disagree (see Appendix).

Procedure

The student participants were administered the questionnaire during one of their lectures. Participants were informed that their responses would be completely anonymous and that all information would be appropriately disposed of after obtaining the numerical responses to the items. Precautions were taken in order to avoid any possible influence between participants. The administrator supported any participant who required assistance concerning the comprehension of the items. No time constraints were placed on the participants to complete the questionnaire and participants were numbered to maintain confidentiality and anonymity.

Analyses

Data generated from the questionnaire responses were inter-correlated (using Pearson’s $r$ coefficient) and subjected to a Smallest Space Analysis (SSA-I). SSA-I is a member of the family of non-metric multidimensional scaling (MDS) procedures developed by Guttman and Lingoes (Lingoes, 1973). The procedure is a well-established technique, having been used for over fifty years to identify structure in phenomena as diverse as intelligence (Guttman & Levy, 1991) and self-esteem (Dancer, 1985).

SSA-I is a ‘data reduction’ methodology that, in mathematical terms, operates from the same starting point as a Principal Components analysis. The procedure differs from factor analytic approaches in that it makes fewer assumptions about the underlying structure of phenomena. Rather than assuming a dimensional structure, SSA allows the emergence of systemic models that tend to be particularly suited to the understanding of variation in human behaviour given the complex, multifaceted range of influences on this. However, it makes no assumptions about causality, as can be the case with Structural Equation Modelling, for example.

Like all the MDS procedures, SSA-I allows the underlying structure of a set of variables to be appreciated by generating a spatial representation of the relationship of every variable to every other variable. SSA-I is a non-metric MDS procedure in that it bases the representation on the rank order of some index of similarity between variables, typically their inter-correlations. The variables are plotted as points in space such that the relative magnitude of the correlations between two variables is inversely related to the relative distance between the points. In short, the closer two points representing two variables, the higher is the likely correlation between those
variables. In this way, the multivariate structure of the relationships among variables can be readily examined through consideration of the configuration of points.

The first projection (vector 1 by vector 2) of the three dimensional solution from the SSA-I is presented in Figure 1. The numbers refer to the full items. For ease of interpretation these are presented under the plots. The Guttman-Lingoes coefficient of alienation obtained for this solution is 0.11 in 12 iterations, indicating an acceptable level of fit between the Pearson’s coefficients of the behaviours and their corresponding geometric distances in the configuration. The three dimensional solution was considered to describe the pattern of relationships more accurately than the 2 dimensional solution. The plot was generated under conditions of global monotonicity. Missing items were excluded on a pair-wise basis.

The structure of the interrelationships between the items was explored using the facet theory approach to research (Canter, 1985). Within the facet approach, regions are drawn on the SSA-I on the basis of the contiguity of the items on the plot. Lines are positioned on the plot to distinguish between regions of substantively equivalent, contiguous items. Consistent with the notion of systemic rather than sharply demarcated structures for human phenomena, there is no mathematically precise position for these lines because they are taken to indicate boundary conditions between defined regions. Items nearer the boundary would be expected to share more of the qualities of the adjacent region than items centrally placed within a region.

Results

A Modified Model of Interpersonal Style

Schutz’s model would be revealed by six distinct regions of Expressed Control, Received Control, Expressed Inclusion, Received Inclusion, Expressed Openness and Received Openness produced by the joint action of the Mode and Content facets. Rather than this FIRO model, the SSA-I suggests a model of interpersonal personality that is a modified version of Schutz’s original structure (see Figure 1).

The SSA allows identification of two conceptual distinctions or facets as the basis for this model. The first facet distinguishes three substantive domains of interpersonal tendency. The first of these can be understood as an interpersonal tendency toward Social Engagement, which integrates most, but not all, of the items in Schutz’s original dimensions of both Inclusion and Openness (Affection). Social Engagement, seen on the left area of the plot (see Figure 1), draws together behaviour that is about relating to others and being involved with others. This may be through doing things with them, as measured by item 4 People invite me to do things, or it may be by sharing feelings, such as measured by item 12 My close friends tell me about private matters and item 9 I confide in my close friends. Both can be understood as part of a broad interpersonal tendency towards engaging with others.

The second substantive domain is readily interpreted in terms of Schutz’s interpersonal dimension concerning Control, pertaining to dominance based preferences in interpersonal relations. Consistent with Schutz’s formulation, all items relating to this are located in the central area of the plot.

Social Withdrawal

A third region of the plot toward the far right is comprised of items such as item 15 I am more comfortable when people don’t get too close, item 42 My close friends keep their feelings from me and item 21 People should keep private feelings to themselves. These are items that Schutz assumed indicated low levels of intimate and affec-
tionate behaviour in interpersonal relations. He assumed, when reverse coded, these measured his Openness/Affection tendency. The SSA-I suggests rather that this set of items may be understood as aspects of a separate tendency to restrict and limit social contact. Indeed the individual correlations between these items and the other Openness items are generally very low (averaging less than 0.2). The SSA-I implies then a distinct component of interpersonal personality that may be labelled Social Withdrawal.

### The Mode Facet

Within this model, a separate distinction of Mode of interaction that distinguishes between proactive, outwardly-directed behaviour, termed Generated behaviour, and the incoming or Accepted component of the individual's interpersonal experience is discernible. Unlike previous factor analyses, the facet analysis shows how, as Schutz anticipated, this Mode facet operates independently of the content-based distinctions between Social Engagement, Control and Social Withdrawal.

Generated behaviour, in the top half of the plot, is represented by items that are about creating the conditions for Control or Social Engagement (e.g. item 53 *I see to it people do things the way I want them*; item 37 *When people are doing things together I join them*). Interestingly, this Mode distinction does not map precisely on to Schutz's

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*Figure 1. SSA-I of the 54 items showing modified FIRO model of Interpersonal Personality*
Expressed – Received Mode distinction that differentiates directly in terms of overt instigator vs. the recipient of behaviour. In the current model, the Generated tendency may be revealed in behaviour that is about creating the conditions under which others will instigate social engagement (or control) as well as the external expressions of that interpersonal need. Similarly, the Accepted component draws attention to the way in which the interpersonal behaviour characteristically received from others is mediated by the individual themselves through a range of encouraging and facilitating tendencies.

The Generated-Accepted modal distinction is clearly a pertinent one in relation to Control, separating items relating to the imposition of control from those relating to the interpersonal tendency to allow (Accept) control from others. However no such distinction can be seen on the plot for the Social Withdrawal tendency. Clearly this makes sense, behaviour that is about removal from social interaction will not vary in whether this is Generated or Accepted.

A distinction between Generated and Accepted Social Engagement is discernible on the plot, although this is less marked than for the Control domain. The items in the upper left area of the plot include 7 I join social groups, 43 I look for people to be with. These are readily understood as outward forms of Engagement; the individual is Generating the Engagement. In the lower left area the items include 36 My friends confide in me, and 6 My close friends tell me their real feelings. These are direct examples of an individual receiving engagement, of an Accepting mode of interaction. Also found here are behaviours that although Schutz interpreted asExpressedbehaviours, require involvement (or engagement) from another individual to be possible. These are indeed predicated upon pre-existing close relationships, for example 9 I confide in my close friends with my close friends and 3 I am totally honest with my close friends, also making sense as part of a general Accepted behaviour mode of the Social Engagement tendency.

This distinction within the Social Engagement domain maps largely (with some exceptions as noted) onto Schutz’s distinction between Openness and Inclusion (including both Expressed and Received forms). Thus whether instigated by others (Schutz’s Received Inclusion) or the individual themselves (Schutz’s Expressed Inclusion) behaviours concerned with establishing or generating affective (rather than Control) based interpersonal relations can be understood as one broad interpersonal tendency (termed Generative Social Engagement).

This is distinct from Accepted Social Engagement that maps onto the more intimate aspects of interpersonal relations described in Schutz’s Openness tendency, irrespective of whether these are what he terms Received Openness (e.g. 6 My close friends tell me their real feelings) or Expressed Openness (e.g. 9 I confide in my close friends). It may be then that Schutz’s original Openness and Inclusion dimensions are better understood as part of the same substantive domain, as indicated by the factor analytic construct validity studies (Macrosson, 2000; Mahoney & Stasson, 2005) but capture different interaction modes (Accepted versus Generated) within this interpersonal tendency.

Discussion

There are many contexts in which inter rather than intra personality can be more pertinent to understanding behavioural differences, from the organisational and clinical to the criminal. Yet the structure of this (unclear) domain, as measured by one of the most widely used personality instruments, has been called into question. A number of recent studies show that Schutz’s original six subscales, Control (Expressed and Wanted), Inclusion (Expressed and Wanted) and Openness/Affection (Expressed and Wanted) can be understood in terms of just two interpersonal tendencies relating to social affective and control issues, with some studies also drawing attention to a further
distinction between Expressed and Wanted aspects of the Control dimension (Dancer & Woods, 2006; Furnham, 2008; Hurley, 1992; Macrosson, 2000; Mahoney & Stasson, 2005).

In exploring this further, the present study considered the structure of interrelationships among the 54 individual FIRO items. This did support, within the current small sample the basic distinction indicated in the recent construct validity studies between a socially affective and a social control component rather than Schutz’s model.

However the examination of the individual items allowed identification of a third conceptual component of interpersonal personality. This was a tendency towards Social Withdrawal, a preference for privacy, non-disclosure and distance in interpersonal relations. This Social Withdrawal tendency emerged from a subset of items that Schutz originally included as reverse-scored components of his Openness (Affection) dimension, such as ‘People should keep their private feelings to themselves’ and ‘I am more comfortable when people do not get too close’. However, the facet analysis drew attention within the current sample, to a qualitatively distinct component of interpersonal personality that was captured by these negatively worded items. It showed that the tendency to actively avoid intimacy (Social Withdrawal) could not, as Schutz assumed be understood as low levels of the tendency towards interpersonal involvement i.e. low Social Engagement.

If replicated with larger and diverse samples, this construct of Social Withdrawal has considerable potential application to personnel selection in the organizational context. It identifies an aspect of personality that could be an immediate de-selection criterion for many roles that rely on team work. Alternatively those who scored strongly on a measure of Social Withdrawal may be considered particularly appropriate for jobs, such as therapeutic or certain roles within the legal/criminal justice system, where the ability to maintain professional boundaries is crucial.

However while the SSA did clearly reveal Social Withdrawal as conceptually distinct from the Social Engagement and Control interpersonal tendencies, future research does need to specify more items to operationalize this construct further.

In terms of the broader debate on the construct validity of Schutz’s FIRO model, the use of the facet approach to analysing this structure shows how the question about the number of dimensions within interpersonal personality has been confused by considerations of the mode of interaction. While factor analytic studies have questioned it, the SSA showed that Schutz’s distinction between Inclusion and Openness (Affection) in interpersonal relations was a valid one. However, rather than representing distinct substantive components of interpersonal personality, Inclusion mapped broadly on to Social Engagement in an outward (Expressed) mode, while Openness captured the inward (Received) mode of this tendency.

Thus rather than the six distinct FIRO dimensions, interpersonal personality may be better understood as organised by the joint action of two facets. One, a qualitative facet of interaction style, distinguishing between Social Engagement, Control and Social Withdrawal tendencies. The second, a facet of mode of interaction, that is distinguished not by the instigator of the interaction (the individual or the other) as assumed within Schutz’s Expressed and Received modes but by a Generated or Accepted approach within the maintenance of interpersonal relations. Within an overall systemic structure, these two facets interact such that the differences between the two modes of interaction are more marked in relation to Control behaviour than Social Engagement behaviour. No distinction between interaction modes was required to describe the Social Withdrawal tendency within interpersonal personality as would be expected given that this is a tendency defined by a lack of interaction.
The current model shows how these different aspects of interpersonal personality produced by the style and mode facets are not distinct dimensions but relate to each other as different emphases within an overall systemic framework. Within the model, for example, the original Expressed Control items (part of the Generated Control region) sit adjacent to many of the original Expressed Inclusion items (part of the Generated Social Engagement region). Studies of the intra-individual personality correlates of the FIRO report patterns of results consistent with this. For example, Furnham (2008) reports strong relationships for Extraversion with both the original FIRO scales of Expressed Control and Expressed Inclusion.

As well as clarifying issues relating to the structure of the FIRO, the current model draws attention to two conceptual issues relevant to broader considerations of the interpersonal domain. Importantly, the current model, although based on only a small sample, suggests that there may be components of interpersonal personality that are not involved with the style in which individuals seek to relate to others nor the extent to which they attempt to avoid others, as revealed in the distinct Social Withdrawal tendency. Schutz argued that all the items on each of the FIRO dimensions could be added together to yield an overall Social Interactivity index. The indications here are that there are some aspects of interpersonal style that operate in the opposite direction to limit contact. Existing models need to be extended to consider this negative component of interpersonal style.

The second, that Schutz drew attention to in his original writings, is the different components of an individual's interactions with others that need to be considered in describing inter- as opposed to intra-individual personality.

Interpersonal style is a reactive, interdependent attribute, contingent upon the interaction with the interpersonal behaviour of the other. Understanding the responsive behaviour an individual tends to elicit and allow from others is as much part of understanding an individual's characteristic style within the subtle domain of human interpersonal relations as the behaviour an individual tends to bring to bear on the interaction. The current model does imply that Schutz's original thinking on this, although overly simplistic in his characterisation of the components of this interactivity (as Expressed and Received), does represent an important advance on established models of interpersonal personality (Leary, 1957; Wiggins, 1996).

Wiggins and Leary agree on two dimensions of Dominance/Dominance-Submission and Affiliation/Love-Hate (Leary, 1957; Wiggins & Trapnell, 1997) as the basis for interpersonal personality, which are broadly substantively equivalent to the Control and Social Engagement tendencies identified here. However the assumption within these models is that interpersonal behaviour in each of these substantive domains can be measured as one point along a single dimension from, for example Dominance to Submission. The implication is that an individual cannot be, for example, highly unwilling to dominate yet highly unwilling to be dominated. The current model suggests rather that the control an individual attempts to generate (Generated Control) in his/her interpersonal relations is independent from the level of control (s)he elicits (Accepted Control). Further larger-scale studies should now explore this possibility.

References


**Appendix**

Table A1

*Components of the FIRO B and the Element B (Adapted From Schutz, 1992)*

<table>
<thead>
<tr>
<th>FIRO B</th>
<th>INTERACTION COMPONENT</th>
<th>ELEMENT B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiate interaction with people</td>
<td>(ACTUAL) EXPRESSED</td>
<td>I include people</td>
</tr>
<tr>
<td>I control people</td>
<td></td>
<td>I control people</td>
</tr>
<tr>
<td>I act close and personal with people</td>
<td>(ACTUAL) RECEIVED</td>
<td>I am open with people</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>People include me</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>People control me</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>People are open with me</td>
</tr>
<tr>
<td>-</td>
<td>WANTED EXPRESSED</td>
<td>I want to include people</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>I want to control people</td>
</tr>
<tr>
<td>I want to be included</td>
<td>WANTED RECEIVED</td>
<td>I want to be open with people</td>
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<td>I want people to control me</td>
<td></td>
<td>I want people to include me</td>
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