VoicePrint - The Technical Background

VoicePrint is a personal and organisational development diagnostic conceived and developed by British psychologist, Alan Robertson, BSc, MA(Oxon), MBA, Member of the British Psychological Society, Chartered Fellow of the CIPD.

The premise behind VoicePrint is that the use of talk is a meta-competence, central not only to how we converse and deal with each other, but also to how we think and manage ourselves. Although the primary means through which people get things done, talk is generally used idiosyncratically and largely unconsciously with results that are often unintended, unproductive and uncorrected. VoicePrint is designed to raise the awareness, skill and impact of our talking.

VoicePrint was first released in May 2012. A more refined scoring protocol and improved, internationally representative norms were introduced in an enhanced version in January 2017. The database currently has over 20,000 sets of results, approximately 65% British and 35% drawn from other countries. The norm group represents an international Managerial, Professional & Technical population. Our ongoing research programme is progressively identifying where significant differences exist between cultures.

The nine voices identified in the VoicePrint model are universals, found and used in all cultures.

Independent Validation

Assessment of the validity and reliability of the VoicePrint model was conducted in 2017 by expert psychometrician and statistician, Jane Pollock from the Department of Continuing Education at the University of Oxford. In terms of VoicePrint's validity, her analysis reports that *'each voice is demonstrated to be independent of the others (PCA or Factor Analysis)'* and that '*clear differentiation can be seen between the normal and pressure voice types for all voices (standardised scores show strong differences in behaviour and usage between the 'normal' and 'pressure' scores) (ANOVA).'*

Component	1	2	3	4	5	6	7	8	9
Articulate	0.000	0.000	0.998	0.000	0.000	0.000	0.002	-0.002	0.001
Advocate	0.996	0.000	0.000	0.000	0.002	0.000	0.000	0.003	-0.003
Advise	0.000	0.000	0.000	0.000	0.000	1.000	-0.001	0.000	0.000
Challenge	0.10	0.14	-0.007	0.000	0.008	0.000	0.000	0.981	0.000
Direct	0.000	0.996	0.000	0.000	0.003	0.000	0.000	0.004	-0.001
Evaluate	0.002	0.003	0.000	0.000	0.997	0.000	0.000	0.002	0.000
Probe	0.000	0.000	0.000	0.999	0.000	0.000	0.001	0.000	0.002
Inquire	-0.15	-0.006	0.005	0.009	0.000	0.000	0.002	0.000	0.984
Diagnose	0.000	0.000	0.003	0.002	0.000	-0.001	0.998	0.000	0.001
% of total variance explained	32.2	20.0	13.3	9.8	9.0	7.3	5.3	1.8	1.2

Principal Component Analysis showing the clear separation of the voices

In terms of the Reliability of the questions contributing to the voice structures, her analysis reports Cronbach Alpha scores (the psychometrician's gold standard) for each voice as follows:

Voice	Articulate	Advocate	Advise	Challenge	Direct	Evaluate	Probe	Inquire	Diagnose
N	707	707	705	707	707	705	707	707	704
Alpha	0.494	0.739	0.498	0.675	0.618	0.436	0.475	0.746	0.618
Items	9	9	9	9	9	9	9	9	9

The desirable threshold for Alpha scores is generally 0.50, although it is accepted that this can be lower in the case of questionnaires with relatively few items per construct. With only 9 items (questions) per voice, VoicePrint is considered to be a 'lean' and efficient questionnaire, achieving acceptable Alpha scores without superfluous questioning. Alpha scores can also be lower when the construct itself is more complex, which Factor Analysis shows to be the case for the Evaluate, Probe, Advise and Articulate voices.

A concern for sensitivity rather than stability
Since its constructs are concerned with facets of behavioural competence, rather than personality traits per se, VoicePrint does not posit a high degree of profile stability (the traditional test/re-test reliability). On the contrary, VoicePrint expects movement, and crucially development, in an individual's profile. VoicePrint recognises that behaviour and competence are influenced by many factors, some relatively fixed and stable, such as personality traits, gender and ethnicity, but others of which are intrinsically more malleable and dynamic, such as role, context, experience and the motivation to learn.

Jane Pollock's analysis found that the VoicePrint diagnostic has good sensitivity to differences between people in terms of personality, gender, ethnicity, occupational role and age, all factors which are known from other research to have the potential to exert influence on individual behaviour.

A rigorous foundation for a practical tool
VoicePrint is a tool intended not for assessment per se but primarily for personal and organisational development. Its purpose is to make useful differences in practice.

What makes VoicePrint exceptionally useful and distinctive in the world of diagnostics is that it is not a conventional personality questionnaire, but an indicator which reveals how competence is being influenced by the much broader set of influences that make up individuality. As such it provides a vital connection between the world of competence, or effective performance, and the world of psychometrics, or human diversity.

VoicePrint generates insights and possibilities for developmental action in its own right, but it also helps to overcome a difficulty experienced with many other psychometric tools and profilers, because it enables their abstract concepts to be translated into behaviours and practical actions that individuals, teams and organisations can readily recognise and quickly apply.

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