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ABSTRACT

Information concerning the extent to which the Holland interest classification was preferred and understood by high school students was investigated. Students were asked to show their preference and indicate which classification was more easily understood when the Holland and Kuder interest classifications were presented. A large majority reported preference for the Kuder classification. A second study compared the Holland typology to a British adaptation which emphasized work-task dimensions. A slight majority of students indicated they preferred the Careers Research and Advisory Centre adaptation and most reported it made more sense than the Holland typology. A final study compared the activity preference of the Kuder with a combined typology with work-task classification of Holland interest categories. In this study, most students preferred the Kuder classification and indicated it was more easily understood. This preliminary study indicated students preferred classifications which indicated activity preferences. Junior high school students preferred the Kuder classification. The practical implications for vocational guidance and interest assessment related to the structuring and delivery of career information are discussed. Findings were relevant to computer assisted guidance packages and self-assessment procedures based on self-categorization of interests. (Author/DWH)

RESEARCH REPORT

HIGH SCHOOL STUDENTS PREFERENCE FOR AND SENSE OF UNDERSTANDING OF THE HOLLAND VOCATIONAL INTEREST CATEGORIES.

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February, 1982.

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ABSTRACT

Information concerning the extent to which the Holland interest classification is preferred and understood by high school students was investigated in three separate studies. In the first study, the Holland and Kuder interest classifications were presented to students (n=368). They were asked to show their preference and to indicate which classification made more sense. A majority (82%) preferred the Kuder classification, and similarly, 86% also reported that it made more sense. The second study compared the Holland typology to a British adaptation, which emphasised work-task dimensions. A slight majority (52%) of students (n=500) indicated that they preferred the CRAC adaptation, while 58% reported that it made more sense than the Holland typology. The final study (n=366) compared the activity preferences of the Kuder with a combined typology cum work-task classification of Holland interest categories. Again, a majority of students (63%) preferred the Kuder classification, and 68% indicated that it made more sense to them. The evidence from this study is that students preferred and understood classifications which indicated activity preferences. Practical implications for vocational guidance and interest assessment are discussed.

HIGH SCHOOL STUDENTS PREFERENCE FOR AND SENSE OF UNDERSTANDING OF THE HOLLAND VOCATIONAL INTEREST CATEGORIES.*

In vocational guidance it has always been considered important to identify career interests (Osipow, 1968). This includes defining an individual's pattern of interests. As well, these interests are ranked in order of importance to the client. The general aim has always been to come up with a variety of ways in which those interests may be pursued. Thus, vocational interest categories were intended primarily as a basis for career exploration i.e. moving from general work groups to specific occupational information.

General interest categories have been useful in guidance because they formed a framework to give overall structure to the world of work. Of course, there are many ways of grouping vocational interests. Some of the major classifications of interest are illustrated in Table 1. Within our Division of Vocational Guidance Services recent emphasis has been directed to the adequacy of the interest types defined by Holland (1973) - Realistic, Investigative, Artistic, Social, Enterprising and Conventional. These categories are used in the Vocational Preference Inventory (Holland, 1965), the Self-Directed Search (Holland, 1970).

At present, there is no information concerning the extent to which the Holland interest classification is preferred and understood by users. This paper reports a preliminary investigation of this classification and compares it to (a) the Careers Research and Advisory Centre (1975) adaptation of the Holland categories and (b) the longstanding Kuder (1956) classification of vocational interests.

Study 1

Two interest classifications ("A - Occupations Finder, Holland (1974) and "B" - Kuder Preference Record - Vocational, Kuder (1956) were given to students (n=368) in Years 9 and 10, at three Sydney high schools. They were asked to show their preference and to indicate which classification made more sense to them.

Results (see Table 2) indicated that an overwhelming majority (82%) preferred the Kuder classification of interests to the Holland categories. Similarly, 86% also reported that this classification made more sense to them. A chi-square test of whether or not there was a significant difference between the proportion of individuals who preferred A (Holland) or B(Kuder) and the extent to which it made sense to them, indicated that both preference and sense of understanding were related ($\chi^2 = 122.6$ $p < .001$).

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* The results of the first study were presented at the Fourth Australian Standard Classification of Occupations Conference, Department of Employment & Youth Affairs, Melbourne, May, 1981.

TABLE 1: SUMMARY OF CATEGORIES ON MAJOR INTEREST INVENTORIES COMMONLY USED IN AUSTRALIA

	Holland (1970) SDS Self-Directed Search	Holland (1965) VPI Vocational Preference Inventory	Kuder (196) KPR V-CH Kuder Preference Record	Rothwell & Miller (1964) RMOIB Occupational Interest Blank	Strong (1966) SVIB - Men Strong Vocational Interest Blank	Strong (1966) SVIB - Women Strong Vocational Interest Blank	Campbell (1974) SCII Strong-Campbell Interest Inventory	Connolly (1954) COIQ Occupational Interest Questionnaire
Scientific	x	x	x	x	x	x	x	x
Social Service	x	x	x	x	x	x	x	x
Clerical	x	x	x	x	x	x	x	x
Computational			x	x	x		x	x
Persuasive	x	x	x	x	x	x	x	x
Literary			x	x	x	x	x	x
Artistic	x	x	x	x	x		x	x
Musical			x	x		x	x	
Practical	x	x	x	x	x	x	x	x
Outdoor			x	x			x	
Prestige							x	

TABLE 2: PREFERENCE AND SENSE OF UNDERSTANDING FOR KUDER Vs HOLLAND INTEREST CLASSIFICATIONS

		Sense		
		Holland	Kuder	Total Students
Preference	(A) Holland	37	28	65(18%)
	(B) Kuder	14	289	303(82%)
	TOTALS	51 (14%)	317 (86%)	368

In view of the importance of an interest classification for vocational guidance, there was a need to repeat this survey. The results may have been affected by Holland's nomenclature e.g.pupils may have adverse reactions to terms such as "Conservative". Also, the brevity of the Holland description may have mitigated against it being preferred.

Study 2

A further study was planned, which investigated whether there was any differences in preference for or understanding of two different nomenclatures for the Holland categories. A British adaptation of the Holland classification (CRAC, 1975) appeared suitable. It provided (a) a different version of the Holland scheme and (b) the two classifications were equated for appearance for length. This CRAC adaptation contained the following categories:

Holland Categories	CRAC Adaptation of Holland Categories	Kuder Interest Equivalents
Realistic	Practical	Outdoor, Mechanical
Investigative	Scientific	Scientific
Artistic	Artistic	Artistic,Literary,Musical
Social	Social	Social Service
Enterprising	Enterprising	Persuasive
Conventional	Clerical	Computational,Clerical

In this second study, students (n=500) in Years 9 and 10 at another three Sydney high schools were similarly asked to indicate their preference and also state which classification made more sense.

Results (see Table 3) indicated that subjects were evenly divided in their preference for either. However, in terms of understanding, the CRAC version was rated much higher. Once again, preference and meaningfulness were not independent ($\chi^2 = 185.83$ $p < .01$).

These two classifications can be distinguished in that they largely refer to (a) occupational types - Holland categories and (b) work-task dimensions - CRAC categories. The evidence from this preliminary study is that work-task dimensions had greater meaning for students.

TABLE 3: PREFERENCE AND SENSE OF UNDERSTANDING FOR TWO VERSIONS OF THE HOLLAND INTEREST CLASSIFICATION

Preference	Sense: Holland	Sense: CRAC	Total Students
(A) Holland	175	64	239 (48%)
(B) CRAC	34	227	261 (52%)
TOTALS	209 (42%)	291 (58%)	500

However, the present study was restricted to established and well-known typologies. It remained to be seen whether a combined classification of occupational types (Holland) and work-tasks (CRAC) plus occupational examples fared better than the activity-preferences implicit in the Kuder interest classification.

Study 3

In this third study, preferences for and sense of understanding for a combined Holland/CRAC interest classification and the activity preferences of the Kuder were investigated. Students (n=366) in Years 9 and 10 at another three urban/rural high schools were similarly asked which classification they preferred and which made more sense to them.

Results (see Table 4) indicated that a majority (63%) preferred the Kuder classification of interests to the combined Holland-type classifications. A majority (68%) also reported that this classification made more sense to them. Again, preference and meaningfulness were not independent ($\chi^2 = 200.34$ $p < .01$).

TABLE 4: PREFERENCE AND SENSE OF UNDERSTANDING FOR KUDER Vs HOLLAND-TYPE INTEREST CLASSIFICATION

Preferences	Sense: Holland-type	Sense: Kuder	Total Students
(A) Holland-type	104	31	135 (37%)
(B) Kuder	14	217	231 (63%)
TOTALS	118 (32%)	248 (68%)	366

Discussions and Conclusions

The evidence from this preliminary study is that students preferred classifications which indicated activity preferences. These also appeared to have more meaning for them. Furthermore, there is evidence that students at junior high school levels seem to prefer the Kuder classification rather than the Holland typology or a variant of the Holland interest categories.

Nevertheless, it was also evident that the more detailed descriptions of Holland's categories in Study 3, yielded high rates of preference and understanding than the briefer descriptions of Study 1. Thus, where the Holland categories are used in guidance, there may be a need to provide further descriptions of the categories, a variety of information (work-tasks,activity preferences, occupational types) and more detailed

explanations.

It was not the purpose of this preliminary study to account for the acceptability of the classification or to provide a theoretical explanation of the observed differences. Indeed, there was no basis for pre-supposing such differences. However, there are some obvious practical implications for vocational guidance and interest assessment especially with respect to the structuring and delivery of career information: (a) findings did not support the choice of the Holland classification for use with high school students, and (b) these results lend some support to the use of the Kuder interest classification for the self-categorisation of interests (Athanasou, 1980). Thus these findings are also particularly relevant to those computer-assisted guidance packages and self-assessment procedures which are based on self-categorisation of interests.

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STUDY 1

CLASSIFICATION "A"

REALISTIC occupations include skilled trades, technical and some service occupations.

INVESTIGATIVE occupations include scientific and some technical occupations.

ARTISTIC occupations include artistic, musical and literary occupations.

SOCIAL occupations include educational and social welfare occupations.

ENTERPRISING occupations include managerial and sales occupations.

CONVENTIONAL occupations include office and clerical occupations.

Which classification of jobs do you prefer? ☐A ☐B

Which classification makes more sense to you? ☐A ☐B

CLASSIFICATION "B"

OUTDOOR interest means that you prefer work that keeps you outside most of the time and usually deals with animals and growing things. Forest rangers, naturalists, and farmers are among those high in outdoor interests.

MECHANICAL interest means you like to work with machines and tools. Jobs in this area include automobile repairmen, watchmakers, drill press operators, and engineers.

COMPUTATIONAL interest means you like to work with numbers. A high score in this area suggests that you might like such jobs as bookkeeper, accountant, or bank teller.

SCIENTIFIC interest means that you like to discover new facts and solve problems. Doctors, chemists, nurses, engineers, radio repairmen, aviators, and dieticians usually have high scientific interests.

PERSUASIVE interest means that you like to meet and deal with people and to promote projects or things to sell. Most actors, politicians, radio announcers, ministers, salesmen, and shop assistants have high persuasive interests.

ARTISTIC interest means you like to do creative work with your hands. It is usually work that has "eye appeal" involving attractive design, colour and materials. Painters, sculptors, architects, dress designers, hairdressers, and interior decorators all do "artistic" work.

LITERARY interest shows that you like to read and write. Literary jobs include novelist, historian, teacher, actor, news reporter, editor, drama critic, and book reviewer.

MUSICAL interest shows you like going to concerts, playing instruments, singing, or reading about music and musicians.

SOCIAL SERVICE interest indicates a preference for helping people. Nurses, boy or girl scout leaders, vocational counsellors, tutors, ministers, personnel workers, social workers, and hospital attendants spend much of their time helping other people.

CLERICAL interest means you like office work that requires precision and accuracy. Jobs such as bookkeeper, accountant, file clerk, sales clerk, secretary, statistician, and traffic manager fall in this area.

STUDY 2

CLASSIFICATION "A"

REALISTIC occupations include skilled trades, technical and some service occupations.

INVESTIGATIVE occupations include scientific and some technical occupations.

ARTISTIC occupations include artistic, musical and literary occupations.

SOCIAL occupations include educational and social welfare occupations.

ENTERPRISING occupations include managerial and sales occupations.

CONVENTIONAL occupations include office and clerical occupations.

Which classification of jobs do you prefer? ☐ A ☐ B

Which classification makes more sense to you? ☐ A ☐ B

CLASSIFICATION "B"

PRACTICAL activities involve physical strength, practical action, motor co-ordination and skill

SCIENTIFIC activities involve an interest in how and why things occur and work.

ARTISTIC activities involve self-expression through artistic media.

SOCIAL activities involve an element of human concern and support.

ENTERPRISING activities involve dominating, selling to or leading others.

CLERICAL activities involve a preference for verbal and numerical tasks.

STUDY 3

CLASSIFICATION "A"

PRACTICAL interest means that you prefer work in skilled trades, technical and some service occupations. These activities involve physical strength and practical action Examples: Printing, Farming, Shop Work, Dressmaking, Gardening, Mining, Cooking, Engineering, X-ray Work.

SCIENTIFIC interest means that you like to know, how and why things occur and work. This includes scientific and some technical occupations. Examples: Astronomy, Museum Work, Biology, Electronics, Chemistry, Geology, Physics, Radio & T.V., Engineering.

ARTISTIC interest means you like to express yourself through artistic media. This includes artistic, musical and literary occupations. Examples: Architecture, Fashion Design, Interior Design, Signwriting, Dancing, Gardening, Music, Writer, Actor.

SOCIAL interest involves showing concern and support. It includes educational and social welfare occupations. Examples: Teaching, Welfare Work, Medicine, Waiter, Beautician, Careers Work, Church Work, Nursing.

ENTERPRISING interest shows that you like activities that involve leadership, responsibility or selling. This includes managerial and sales occupations. Examples: Advertising, Auctioneer, Politics, Sales, Trade Union Work, Management.

CLERICAL interest means that you prefer to deal with words, data, facts and numbers. This includes office and clerical occupations. Examples: Accountancy, Banking, Computer Work, Reception Work, Typing, Telephonist, Editor, Stockbroker, Insurance, Legal Work.

Which classification of jobs do you prefer?

☐ A
☐ B

Which classification makes more sense to you?

☐ A
☐ B

CLASSIFICATION "B"

OUTDOOR interest means that you prefer work that keeps you outside most of the time and usually deals with animals and growing things. Forest rangers, naturalists, and farmers are among those high in outdoor interests.

MECHANICAL interest means you like to work with machines and tools. Jobs in this area include automobile repairmen, watchmakers, drill press operators, and engineers.

COMPUTATIONAL interest means you like to work with numbers. A high score in this area suggests that you might like such jobs as bookkeeper, accountant, or bank teller.

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