

Career decision states of Australian and South African high school students

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Abstract

The influence of contextual factors on the career decision states of 429 South African and 623 Australian male and female students in grades 8 to 12 was investigated. The results for both national samples on the Career Decision Scale demonstrate that grade, gender, and the interaction of grade and gender impact on the developmental progression of career decision behaviour. Gender differences between nations were mainly evident in the male samples. Both South African and Australian students are more decisive in lower grades. International differences suggest that South African students are more certain but also more indecisive than Australian students. The implications for educational decision points and career education practices are discussed.

Career decisional states of Australian and South African high school students

A major focus of career development theorists has been on the process of career decision making and the career decision states of certainty and career indecision. Osipow and Fitzgerald's (1996) review of career decision research demonstrates that the dimensions of career indecision have been diversely conceptualised and operationalised. From earlier conceptions of career decided and undecided as a simple dichotomy, the field has moved in more recent times to conceptions of career decision behaviour as a unidimensional and even multidimensional continuum (Savickas, 1995).

While there is general agreement that career decision making remains a central issue for career psychology (Betz, 1992; Fouad, 1994; Gati, Krausz, & Osipow, 1996), the different conceptualisations of career decision states has resulted in research findings that Sepich (1987) has referred to as "a mixed bag, at best" (p. 17). One major outcome of career decision research in more recent times has been the identification and measurement of different types of career indecision and career decision states (Vondracek, Schulenberg, Skorikov, Gillespie, & Wahlheim, 1995). A predominant research focus of such career decision states has been its correlates, an extensive review of which can be found in Slaney (1988) and Stead and Watson (1999). These reviews demonstrate that the literature on career decision making and career indecision largely reflects North American and European research, thus limiting the generalisability of the findings reported. There has been little career decision research in Australia and South Africa. For instance, less than two percent of South African career research in more recent times has focused on the career decision process (Watson & Stead, 1994), while Patton and Creed (2001) report a similar situation for Australia.

Career decision points are reached at various stages in an individual's development. Vondracek et al. (1995) have argued that there are obvious conceptual linkages between

career decision states and the developmental tasks of adolescence, thus calling for career decision theory to be sensitive to contextual factors (Vondracek, Lerner, & Schulenberg, 1986). For example, career theorists caution against early commitment to a career choice, yet the realities of secondary education systems require career oriented decisions throughout the high school years, with curricular choices greatly affecting future career plans. Super (1980) refers to such educational transition points as the “premature forcing of career decisions by the educational system” (p. 255) and regards these decision points as varying according to the educational opportunities available. More recently, Multon, Heppner and Lapan (1995) have suggested that structured decision points in high school may lead to a foreclosure on options and may also partially explain high drop out rates in American schools. Similarly, Stead and Watson (1999) identify the school system as one of the important contextual factors that need to be considered in the career decision behaviour of South African adolescents.

Career decision points that adolescents must face call for new information about themselves, about educational choices, and about future careers. McMahon (1992) believes, however, that appropriate decisions will not be made solely through the provision or acquisition of information, and that Australian adolescents are disadvantaged “through not considering the context in which they operate” (p. 13). McMahon describes contextual elements such as the educational system as filters through which information is processed and evaluated. Despite an international recognition that secondary school transition points may impact on career decision behaviour (Gottfredson, 1981; Super, 1980), there has been little research that has examined the developmental progression of career decision behaviour (Multon, Heppner, & Lapan, 1995; Watson & Stead, 1994). Cross-sectional research that has been conducted on career decision states and school grades or age has produced results that have varied according to the populations studied (Watson & Stead, 1994) and that have shown no consistent monotonic pattern across age and school grade levels (Patton & Creed,

2001). Earlier research on South African adolescents established greater career indecision in grades where educational decisions were required (grades 9 and 11) than in other high school grades. Subsequent longitudinal research on South African adolescents (Watson & Stead, 1994) confirmed these initial findings, leading the authors to conclude that school grade exerts a moderating contextual influence on the career decision behaviour of adolescents. Other South African career decision research suggests that students who have been exposed historically to better career education services at the secondary school level may evidence greater career decidedness at the tertiary education level than more disadvantaged students (Watson & Smith, 1999).

Recent research on Australian adolescents' career decision behaviour in relation to age reports more complex findings (Patton & Creed, 2001), with a lack of monotonic development in both career certainty and career indecision. The results of this study demonstrate that decision behaviour is clearly affected by external decisional pressures within the school system. Both South African and Australian career decision research have called for further studies to be conducted.

Gender is another correlate that has been studied in relation to the career decision behaviour of adolescents. The results of such studies have been conflicting (Kelly & Cobb, 1991; Kelly & Colangelo, 1990), with several studies failing to determine whether gender differences in career decision status were statistically significant (Watson & Stead, 1994). Male adolescents have been reported as more career decided than females (Kishor, 1981; Richardson, 1974), female adolescents more decided than males (Lokan, Boss, & Patsula, 1982; Vondracek, Hostetler, Schulenberg, & Shimizu, 1990; Wallace-Broschious, Serafica, & Osipow, 1994), while earlier research found no gender differences (Neice & Bradley, 1979). Similarly, earlier South African research failed to establish gender differences in the career decision behaviour of adolescents (Stead, 1989; Van Vuuren, 1975), while more recent

research established that female adolescents in grades 8 to 12 demonstrated a more linear progression of greater decidedness than males both cross-sectionally and longitudinally (Watson & Stead, 1994). Patton and Creed (2001) found, on the other hand, that Australian adolescent females were more indecisive than males across all high school ages and that, while they were more certain than males at ages 13 and 14, they were significantly less certain at age 17. These authors postulate that the role of gender may be largely determined by contextual factors such as equality of opportunity and access to alternative career options.

It is clear from international and national research to date that the possible influence of gender on the career decision states of adolescents remains unclear and calls for further research. While the structure of secondary school systems is such that adolescent career decision points coincide with course and subject selection, the secondary education systems in South Africa and Australia call for adolescents to make these decisions at different transition points in high school. South African adolescents are required to make initial choices at the end of grade 8 but major choices in grade 9 where senior high school subjects are chosen on differentiated grade levels. Australian adolescents make initial choices at the end of grade 8 and major senior high school choices at the end of grade 10.

There are also differences between the two national education systems in the nature, range and combination of choices available. In the schools sampled in the present research, South African students take 7 compulsory subjects at the end of grade 8 and choose 2 out of 9 electives, while Australian students take 5 compulsory subjects and 3 out of 13 electives. At the end of grade 9 the South African students take 2 compulsory language subjects and 4 out of 11 electives, while the grade 10 Australian students take one compulsory language subject and 5 out of 33 electives. The subject choice packages of the latter grade students of the two nations impact differentially on university entrance criteria. The present study seeks greater

clarity, thus, about the context within which adolescents from two nations make career decisions by exploring the possible influence of gender and school grade on such behaviour.

Method

Participants

The total number of participants included in the study was 1052 secondary school students enrolled in Grades 8-12 across two secondary schools, one in the south-eastern part of Australia and the other in the eastern part of South Africa. The two schools were purposively selected in order to provide a match in terms of socio-economic and geographic backgrounds. Both schools were suburban based in medium sized cities, and each was established in a middle level socio-economic part of the city. Convenience sampling resulted in five hundred and thirty-two (51%) female and 520 (49%) male students. Students ranged in age from 12-19 years and had a mean age of 15.16 years ($SD = 1.47$). There were 623 (59%) students from Australia, made up of 331 (53%) females and 292 (47%) males. These Australian students had a mean age of 15.06 years ($SD = 1.50$). There were 429 (41%) students from South Africa, made up of 201 (47%) females and 228 (53%) males. The South African students had a mean age of 15.31 years ($SD = 1.40$).

Instrument

Career Decision-Making. The Career Decision Scale (CDS; Osipow, Carney, Winer, Yanico, & Koschier, 1976; Osipow, 1987) was used to measure decision-making readiness, a construct that addresses the level of decidedness about a career. The CDS inventory contains 19 items and consists of two subscales, the CDS-Indecision scale that provides a measure of career indecision, and the CDS-Certainty scale that indicates the degree of certainty that the respondent feels in having made a career decision. The CDS-Indecision Scale is made up of 16 items, the CDS-Certainty scale is made up of two items, and there is an open-ended question that allows respondents to record their concerns in their own words. Responses on

the Indecision and the Certainty subscales are reported in this study. Participants were asked to respond to items in the two subscales by indicating on a four-point Likert-like scale whether the item was “not at all like me” through to “exactly like me”. There was a minor rewording of some of the items, specifically the three items of the original scale where the word “major” was replaced by “educational qualification”. Such an adaptation is essential in the Australian and South African context where the word “major” would present conceptual problems for many high school students. Higher scores on the CDS-Indecision subscale indicate greater indecision; higher scores on CDS-Certainty indicate greater certainty.

Internal consistency coefficients have been consistently reported in the .80 range (Hartman, Fuqua & Hartman, 1983). Test-retest reliabilities have been reported in the range of .61-.90 (Hartman, Utz & Farnum, 1979). Internal reliability coefficients have been previously established for South African high school students at .85 (Watson, Foxcroft, & Stead, 1991) and at .89 for the CDS-Indecision and .73 for the CDS-Certainty subscales for Australian adolescents (Patton & Creed, 2001). Internal reliability co-efficients calculated in the present study were .88 for CDS-Indecision and .76 for CDS-Certainty. Concurrent validity (Hartman & Hartman, 1982), construct validity (Hartman et al., 1983) and predictive validity (Hartman, Fuqua, Blum & Hartman, 1985) have all been adequately demonstrated.

Procedure

The survey data were collected specifically to allow comparisons across the two countries. Survey forms containing the CDS, and asking questions about age, grade and gender were administered to students in Grades 8 to12 across the two secondary schools that participated in the study. Classroom teachers, who had been provided with instructions regarding the administration protocol, administered the survey forms.

Results

Career Decision States by School, Gender and Grade

A factorial multivariate analysis of variance was performed to assess the effects of school, gender and grade on the Career Decision Scale subscales of CDS-Certainty and CDS-Indecision. This MANOVA utilised School (Australia and South Africa), Gender (male and female) and Grade (8-12) as the independent variables, and used the two sub-scales of CDS-Certainty and CDS-Indecision as the dependent variables. Summary data for this analysis are presented in Tables 1 and 2.

Table 1

Summary data for Career Decision Scale subscale scores of CDS-Certainty and CDS-Indecision for Males and Females across Grades 8-12 for the Australian and South African schools.

Grade	Australian High School							South African School									
	Males			Females				t^1	Males			Females				t^2	t^3
<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>		<i>N</i>		<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>				
CDS-Certainty																	
8	88	4.38	1.79	99	4.59	1.80	-0.80	42	5.00	1.50	43	4.93	1.71	0.20	-1.96	-1.06	
9	32	4.91	1.67	46	5.13	1.60	-0.60	49	4.90	1.66	49	4.76	1.55	0.44	0.02	1.16	
10	77	4.21	1.54	85	4.49	1.65	-1.14	69	4.97	1.71	45	4.53	1.58	1.38	-2.84**	-0.13	
11	52	4.46	1.59	54	4.74	1.66	-0.88	50	4.88	1.90	45	4.80	1.31	0.24	-1.21	-0.19	
12	43	4.37	1.41	47	3.68	1.45	2.29*	18	4.50	1.42	19	4.16	1.68	0.67	-0.32	-1.16	
Total	292	4.40	1.63	331	4.53	1.70	-0.98	228	4.90	1.68	201	4.70	1.55	1.32	-3.43**	-1.10	
CDS-Indecision																	
8	88	46.17	9.85	99	48.85	9.02	-1.94	42	47.74	8.09	43	47.02	8.15	0.41	-0.90	1.14	
9	32	41.22	9.44	46	45.61	8.52	-2.14*	49	51.76	7.47	49	46.71	9.12	2.99**	-5.59***	-0.61	
10	77	43.81	10.65	85	45.44	10.13	-1.00	69	49.65	8.83	45	49.33	7.89	0.20	-3.58***	-2.42*	
11	52	45.06	9.23	54	47.52	10.51	-1.28	50	47.98	9.66	45	48.73	8.47	-0.40	-1.56	-0.63	
12	43	44.16	10.39	47	52.38	9.62	-3.90***	18	54.83	6.51	19	51.21	7.66	1.54	-4.03***	0.47	
Total	292	44.51	10.04	331	47.81	9.81	-4.14***	228	49.79	8.64	201	48.24	8.41	1.88	-6.44***	0.55	

Note: t^1 = t-values and levels of significance for differences between males and females in the Australian school.

t^2 = t-values and levels of significance for differences between males and females in the South African school.

t^3 = t-values and levels of significance for differences between males in the Australian school and males in the South African school.

t^4 = t-values and levels of significance for differences between females in the Australian school and females in the South African school.

* = $p < .05$; ** = $p < .01$; *** = $p < .001$

Table 2
 Summary data for Career Decision Scale subscale scores of CDS-Certainty and CDS-Indecision for Total scores for each School for Grades 8-12.

Grade	Australian High School			South African High School			t^1
	<i>N</i>	Total <i>M</i>	<i>SD</i>	<i>N</i>	Total <i>M</i>	<i>SD</i>	
CDS-Certainty							
8	187	4.49	1.79	85	4.96	1.60-2.11*	
9	78	5.04	1.62	98	4.83	1.60-0.87	
10	162	4.36	1.60	114	4.80	1.66-2.21*	
11	106	4.60	1.63	95	4.84	1.64-1.03	
12	90	4.01	1.46	37	4.32	1.55-1.08	
Total	623	4.47	1.67	429	4.81	1.62-3.22**	
CDS-Indecision							
8	187	47.59	9.49	85	47.38	8.08-0.18	
9	78	43.81	9.11	98	49.23	8.67-4.03***	
10	162	44.66	10.38	114	49.53	8.44-4.28***	
11	106	46.31	9.93	95	48.34	9.08-1.50	
12	90	48.46	10.76	37	52.97	7.26-2.74**	
Total	623	46.26	10.05	429	49.07	8.56-4.86***	

Note: t^1 = t-values and levels of significance for total differences across the two schools.
 * = $p < .05$; ** = $p < .01$; *** = $p < .001$

Significant multivariate main effects were found for School [$F(2, 1031) = 20.48, p < .001$] and Grade [$F(8, 2062) = 3.69, p < .001$]. Significant multivariate interaction effects were found for School by Grade [$F(8, 2062) = 2.19, p < .05$] and School by Gender [$F(2, 1031) = 0.35, p < .001$]. At the univariate level, significant main effects for School were found for CDS-Certainty [$F(1, 1032) = 7.10, p < .01$] and CDS-Indecision [$F(1, 1032) = 28.53, p < .001$]. Significant main effects for Grade were found for CDS-Certainty [$F(4, 1032) = 4.13, p < .01$] and CDS-Indecision [$F(4, 1032) = 4.10, p < .01$]. A significant main effect for Gender was found for CDS-Indecision [$F(1, 1032) = 5.83, p < .05$]. A significant interaction effect for School by Grade was found for CDS-Indecision [$F(4, 1032) = 3.39, p < .01$]. A significant interaction effect for School by Gender was found for CDS-Indecision [$F(1, 1032) = 15.19, p < .001$]. Finally, a significant three-way interaction effect for School by Gender by Grade was found for CDS-Indecision [$F(4, 1032) = 2.43, p < .05$].

In relation to Gender for the Australian school, for CDS-Certainty, females scored significantly lower than males at the Grade 12 level only. For CDS-Indecision, females scored significantly higher than males overall and individually at Grades 9 and 12. In relation to Gender for the South African school, for CDS-Certainty, no gender differences were identified. For CDS-Indecision, females scored significantly lower than males individually at Grade 9 only. See Table 1 for t values and levels of significance.

For Gender across the two Schools for CDS-Certainty, Australian males scored significantly lower than South African males overall and individually at the Grade 10 level. For CDS-Indecision, Australian males scored significantly lower than South African males overall and individually at the Grade 9, 10, and 12 level. For CDS-Certainty, no differences were identified between Australian and South African females. For CDS-Indecision, Australian females scored significantly lower than South African females at the Grade 10 level. See Table 1 for t values and levels of significance.

In relation to grade, Australian students scored significantly lower than South African students on CDS-Certainty overall and individually at the Grade 8 and 10 level. For CDS-Indecision, Australian students scored significantly lower overall and individually at the Grade 9, 10 and 12 levels. See Table 2 for t values and levels of significance.

In relation to Grade for Australian students, for CDS-Certainty [$F(4, 618) = 4.42, p < .01$] Grade 9 students scored significantly higher than Grade 10 ($p < .05$) and Grade 12 students ($p < .01$). For CDS-Indecision [$F(4, 618) = 4.16, p < .01$] Grade 9 students scored significantly lower than Grade 12 students ($p < .05$) and Grade 10 students scored significantly lower than Grade 12 students ($p < .05$). See Table 2 for summary data. For Australian males, no across Grade differences were identified for CDS-Certainty or CDS-Indecision. For Australian females on CDS-Certainty [$F(4, 326) = 4.80, p < .01$] Grade 8 females scored significantly higher than Grade 12 females ($p < .05$). Grade 9 females scored significantly higher than

Grade 12 females ($p < .001$) and Grade 11 females scored significantly higher than Grade 12 females ($p < .001$). For CDS-Indecision [$F(4, 326) = 4.89, p < .01$] Grade 9 females scored significantly lower than females in Grade 12 ($p < .01$) and Grade 10 females scored significantly lower than females in Grade 12 ($p < .01$). See Table 1 for summary data.

In relation to Grade for South African students for CDS-Certainty, no differences were identified across the grades. For CDS-Indecision [$F(4, 424) = 3.08, p < .05$] Grade 8 students scored significantly lower than Grade 12 students ($p < .01$) and Grade 11 students scored significantly lower than Grade 12 students ($p < .05$). See Table 2 for summary data. For South African males, no across Grade differences were identified for CDS-Certainty. For CDS-Indecision [$F(4, 223) = 3.45, p < .01$] Grade 8 males scored significantly lower than Grade 12 males ($p < .05$) and Grade 11 males scored significantly lower than Grade 12 males ($p < .05$). For South African females no across Grade differences were identified for CDS-Certainty or CDS-Indecision. See Table 1 for summary data.

Discussion

There are intra- and inter-national differences on the Certainty and Indecision scores. Certainty scores on the CDS provide an indication of definite career and educational choices which the individual is comfortable with and has a plan of action for. There is a general trend in the mean scores for Australian female adolescents to be more certain than their male counterparts except in their final year of schooling where they are significantly less certain. There is an opposite trend in the Certainty mean scores of the South African sample with males appearing more certain in all grades, although such a trend fails to reach significance.

Gender differences between the two nations on Certainty scores are clearly evident in the male samples. South African males are significantly more certain than Australian males overall and specifically in grade 10. While there are no significant differences between the

national female samples, there is a trend in the mean scores for the South African females to be more certain than the Australian females.

The gender differences in the Australian sample in the Indecision scores indicate that female adolescents are significantly more indecisive than male adolescents, and specifically so in grades 9 and 12. While the only gender difference in Indecision scores for the South African sample is the finding that males are significantly more indecisive in grade 9, there is a trend for male Indecision scores to be higher in most grades.

Gender differences between the two nations on Indecision scores are again most clearly evident in the male samples. South African male adolescents are significantly more indecisive than their Australian counterparts, specifically in grades 9, 10 and 12. The single gender difference for females indicates that South African female adolescents are more indecisive than Australian female adolescents in grade 10.

When the Certainty and Indecision results are considered together, several interesting observations can be made. In general, there are more gender differences in the Australian sample than the South African sample. In the Australian sample female adolescents appear more certain but more indecisive than their male counterparts. The opposite observation can be made of the South African sample, where there is a trend for males to be more certain but more indecisive than their female counterparts. Gender differences between nations are found almost exclusively in the male sample, with South African male adolescents more certain but more indecisive than Australian male adolescents.

The present findings support previous research on gender differences in the career decision states of adolescents in different ways, ways that seem dependent on the national findings quoted. For example, the trend in the South African sample would support research (Kishor, 1981; Richardson, 1974) that has found males more decided than females. The Australian findings for gender, on the other hand, would support research (Vondracek,

Hostetler, Schulenberg, & Shimizu, 1990; Wallace-Broschious, Serafica, & Osipow, 1994) that has reported female adolescents as more career decided than males. The results also clearly support Vondracek, Lerner and Schulenberg's (1986) call for career decision theory to be sensitive to contextual factors. The international comparisons for gender on the CDS in particular demonstrate differences in the Australian and South African male samples and caution researchers to interpret local findings in the context within which the adolescents live and study. As such these results support more recent findings of national differences in career decision-making style and career decision-making self-efficacy (Mau, 2000).

McMahon (1992) believes that contextual factors can act as filters through which cognitive aspects of the career decision process can be processed. Given the nature of the items on the CDS, it is clear that male adolescents in different national contexts may also differ in their affective responses to the career decision process. An examination of the Certainty and Indecision results in relation to the item content of their respective subscales would suggest that individuals who are certain about a career choice are not necessarily, by implication, career decisive. Indeed this is demonstrated by different genders in each nation. Such findings should caution career education specialists at a secondary educational level that adolescents' positive statements about career choice may not reflect positive decisional behaviours.

There are intra- and inter-national grade differences on the Certainty and Indecision scores. In general, there is no consistent monotonic increase in the Certainty scores from grades 8 to 12 in both national samples. In fact, grade 12 students have the lowest mean score, i.e. they are the most uncertain, in both samples. While South African male and female adolescents show no grade differences in their Certainty scores, Australian adolescents are significantly more certain in the lowest grade when compared to grades 10 and 12, with the latter grades representing decisional points in the Australian school. These grade differences

in Certainty scores are mainly to be found in the female sample. The international comparison of the Certainty scores clearly demonstrates that the Australian adolescents are significantly less certain than their South African counterparts, and specifically so in grades 8 and 10.

There is also no consistent monotonic increase in the Indecision scores from grades 8 to 12 in both national samples. As with the Certainty scores, both national samples record the highest mean score in grade 12, i.e. such students are the most indecisive in their respective samples. There are significant grade differences on the Indecision scores for the national samples. Both Australian and South African adolescents are more decisive in the lower grades. There are gender differences between the two nations in their Indecision scores over the five school grades. While South African males demonstrate grade differences, Australian males do not. The opposite is true for females, with South African females demonstrating no grade differences, while Australian females do. The grade differences for South African males and Australian females both demonstrate more decisiveness in lower grades. The international comparison of the Indecision scores demonstrates that the Australian sample is significantly more decisive than the South African sample, and specifically in grades 9, 10 and 12.

When the Certainty and Indecision scores for grade are considered together, several interesting observations can be made. The Australian female adolescents are more uncertain and more indecisive, generally, in the higher grades, while the male adolescents record no grade differences on either subscale. The South African male adolescents are more indecisive in the higher grades, while the female adolescents record no grade differences on either subscale.

The results for both national samples demonstrate that grade, gender, and the interaction of grade and gender, impact on the developmental progression of career decision behaviour.

There are also indications that the national contexts impact on the development of career decision behaviours. The present findings support previous Australian research that has found no monotonic development in career certainty and indecision (Patton & Creed, 2001) and South African research that has established that school grade exerts a moderating contextual influence on career decisional behaviour (Watson & Stead, 1994). Earlier research findings that career decision states may vary according to population groups within a national sample (Watson & Stead, 1994) are endorsed across national samples in the present research.

While there is recognition that career decision behaviour may fluctuate between decidedness and indecision during adolescence (Vondracek, Schulenberg, Skorikov, Gillespie, & Wahlheim, 1995), the present findings would suggest that contextual factors such as educational and career decision points may impact differentially from nation to nation. The Australian adolescents of the present sample are clearly less certain than their South African counterparts, and specifically so at the start of high school and grade 10, where critical subject choices are called for. On the other hand, the South African adolescents of the present sample are significantly more indecisive than their Australian counterparts in three grades, two of which call for educational and career choices to be made.

There is an interesting dichotomy between the Certainty and Indecision scores in both national samples. Greater undecidedness amongst the Australian adolescents seems to be accompanied by less indecisiveness. The opposite seems true for the South African adolescents. A possible explanation for this dichotomy may be found in the choices available to adolescents in the two educational systems. The Australian adolescents face an extensive and varied subject choice package when compared to their South African counterparts. There are three times as many electives available to the Australian adolescents. In addition, the South African adolescents have two of their six choices prescribed, compared to one prescribed choice out of six for the Australian adolescents. Thus, while the Australian

adolescents may feel more capable of making a career choice than the South African adolescents, they may be less certain about such decisions taken, given the multiple choices and pathways available to them. In this regard, Iyenger and Lepper (2000) suggest that the number of choices facing individuals may itself be a contextual factor in their decisional behaviour. Their research of what they term the “choice overload theory” (p. 996) established that individuals are more likely to make a choice, to be more certain, when offered a limited array of choices rather than a more extensive array of choices.

Another possible explanation for the differential career decision behaviour of the two national samples may be found in the career education programmes available at the schools sampled. The South African school provided a clearly defined, highly structured career education programme that formed part of the curricula activities from grades 8 to 12. An examination of the content of this program revealed that the major emphasis was on cognitive exploration concerning subject and career choice information. McMahon (1992) has observed that Australian career education programmes are school-specific and vary in their content, depth, time allocation and staff expertise. This is demonstrated by the Australian school of the present sample where no formalized career education programmes are provided and short-term interventions are designed to meet the demands of specific educational transition points.

Given the certainty but indecisiveness of the South African adolescents and the uncertainty but decisiveness of the Australian adolescents, it may prove fruitful to examine whether the nature of career education programmes and their timing may itself be a contextual factor in the career decisional behaviour of adolescents. Perhaps the highly structured, cognitive nature of the South African career education programme would enhance certainty but not address deeper issues concerning individuals’ feelings about their capabilities to make such decisions. On the other hand, the lack of a more systematic career education programme in the Australian school may contribute towards adolescents’

uncertainty about the practicalities of implementing choices in what is a complex choice process.

A limitation of the present study is that the interpretation of the results is confined to the specific nature of the sample and the school contexts within which they develop. However, while the present findings are limited to the specific schools sampled in Australia and South Africa, there is clear evidence that gender and grade impact on the career decisional states of the two national samples in different ways. The present research suggests that there are contextual factors in the educational systems of the two countries. It has not examined, however, more macrocontextual factors such as employment opportunities and gender discrimination that may also impact on adolescents' career decisional behaviour. Further research on the variety of contextual factors that may impact on the career decisional behavior of adolescents living in particular contexts is called for. Specifically, there is a need to confirm the present findings on more heterogeneous high school populations across the present and other nations.

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