



# Career agility for purposive career exploration: Role of adult learners' career orientations and digital-era world of work awareness



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Background: There is limited empirical research on the role of individuals' career orientations, digital-era world of work awareness and career agility mindset in purposive career exploration.

Objectives: The objective of this study was to assess the extent to which career orientations and awareness of the digital-era world of work contribute to a career agility mindset.

Method: The cross-sectional quantitative survey involved a sample of 486 adult learners (65% women; 35% men; 85% black learners; 15% white learners; and mean age 34 years) in the economic and management sciences field.

Results: Regression analysis revealed the protean-type career orientations of technical and functional competence, autonomy and independence, and pure challenge career orientations as significant predictors of digital-era world of work awareness. Digital-era world of work awareness and the technical and functional competence, pure challenge and general management career orientations acted as significant antecedents of the career agility mindset.

Conclusion: The associations between the study constructs offer promising support for applying principles of career exploration theory in digital-era purposive career exploration counselling.

Keywords: protean-like career agility mindset; career exploration; career orientations; purpose-enhancing career development; digital-era world of work awareness.

#### Introduction

The digital-era world of work offers increased opportunities for exploring new and alternative forms of careers, jobs and occupations made possible by technological innovation (Brown et al., 2018; Coetzee, Ferreira, & Potgieter, 2021a; Deloitte, 2021; Lent, 2018). Modern conceptualisations of career exploration (Jiang, Newman, Le, Presbitero, & Zheng, 2019) explain intrinsic and extrinsic career exploration as a hallmark of self-regulatory career adaptive functioning throughout all stages of the modern-day more uncertain and turbulent career. As an adaptive mechanism of personal agency, intrinsic and extrinsic career exploration enable individuals to purposefully cultivate their career agility and adaptability for career adaptation and renewal in their vocational development (Jiang et al., 2019; Rudolph, Lavigne, & Zacher, 2017).

Career exploration fosters individuals' confidence in the intentional crafting of a meaningful, life-enhancing career future aligned to intrinsic career values, interests and life-career aspirations and goals (Bates, Rixon, Carbone, & Pilgrim, 2019). The career exploration process endorses a protean-like career agile mindset that guides agency in the management of a sustainable career in today's turbulent and complex world of work (Bates et al., 2019; Coetzee et al., 2021a; Hall, Yip, & Doiron, 2018). Thus, career-agile individuals demonstrate adaptive readiness to meet the unfamiliar and unknown career phenomena and options presented by the digital-era work environment (Coetzee, 2021a; Hirschi, 2018; Lent, 2018). A career agile growth mindset is associated with personal resilience in challenging times, job and life satisfaction, self-efficacy in career goal achievement and career well-being (Caniels, Semeijn, & Renders, 2018; Coetzee, 2021b; Ting & Datu, 2020).

Career exploration involves a purpose-driven exploration and evaluation of internal attributes such as career interests and values and external opportunities and constraints in relation to a career-relevant context (Flum & Blustein, 2000; Jiang et al., 2019). The present study explored the associations between three constructs of career exploration, namely, career orientations,

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digital-era world of work awareness and career agility. Career orientations are intrinsic career values that guide career decision-making and satisfaction (Abessolo, Hirschi, & Rossier, 2021; Schein & Van Maanen, 2016). Research indicates individuals' career orientations as an intricate aspect of self- and environmental exploration that contributes to job satisfaction during the initial stages of employment (Jiang et al., 2019; Werbel, 2000).

Individuals' digital-era world of work awareness alludes to purposive extrinsic career exploration behaviour and cognitions that afford access to information about the changing nature of work, and new occupation and job opportunities, and the fit of these with personal career values and interests (Coetzee, Ferreira, & Potgieter, 2021b; Jiang et al., 2019). Digital-era world of work (extrinsic) career exploration facilitates coherent, purpose-enhancing career plans, the pursuit of a personally meaningful work–life career, and the management of career–life transitions and changes (Jiang et al., 2019). Intrinsic and extrinsic career explorations build career-related capabilities, resources and knowledge, and enhance individuals' career adaptability (Guan et al., 2015; Jiang et al., 2019).

The objective of this study was twofold. Firstly, it explored the extent to which intrinsic career orientations inform individuals' digital-era world of work awareness. Secondly, the study explored whether individuals' intrinsic career orientations and digital-era world of work awareness contribute to the career agility mindset. Research by Jiang et al. (2019) shows that intrinsic and extrinsic career explorations assist individuals to develop adaptive positive cognitions, attitudes and behaviours that benefit their careers. However, it is not clear how career exploration in the form of intrinsic career orientations and extrinsic world of work awareness relates to a career agility mindset. Research by Cai et al. (2015) shows that career exploration explains the process by which intrinsic attributes lead to the development of positive mindsets about the career future and career adaptability. However, there is currently a lack of research on the constructs of digital-era world of work awareness and career agility in the career exploration context.

#### Career agility as a mindset of adaptivity

Anchored in Savickas's (2013) model of psychological career adaptation, career agility denotes a mindset of adaptivity which is the psychological readiness to embrace the complexities and ill-defined occupational and work challenges of the digital-era world of work (Coetzee, 2021a; Hirschi, Herrmann, & Keller, 2015; Savickas, 2013). Career agility (i.e. individuals' willingness to speedily and proactively adapt and respond to changes that influence their career success) acts as a precondition for the active use of the career adaptability resources needed for agentic career exploration and self-regulatory career management (Coetzee et al., 2021a; Savickas, 2013).

Individuals' career adaptivity is reflected in the mindset states of technological adaptivity (i.e. optimism and problem-solving orientation towards seeking out new occupational and upskilling opportunities made possible by technological advancement), agile learning (i.e. energetic positivity towards searching out continuous learning and growth opportunities) and career navigation (i.e. self-efficacy in adapting to the changing career environment, and identifying gaps in the employment market that one could fill in unique ways; Coetzee, Bester, Ferreira, & Potgieter, 2020; Coetzee, 2021b). These mindset states allude to the proteanlike agentic aspects of openness to new experiences, volition, personal autonomy and control over one's career that facilitate the use of career adaptability resources such as active career planning, career decidedness, extrinsic career exploration and career self-efficacy beliefs (Coetzee et al., 2020; Hall et al., 2018; Hirschi et al., 2015). Research has shown links between openness to new experiences and higher levels of productive career planning and exploration (Ting & Datu, 2020).

Theoretically, it appears that the assessment of career agility may be useful as a tool in career exploration counselling to elucidate individuals' adaptive readiness to confidently and intentionally engage in extrinsic career exploration. However, individuals need a strong internal compass (i.e. a meaningful value-driven passion towards a career domain) to not only guide their career decisions and development, but also to activate their career agency in extrinsic career exploration (Hall et al., 2018). In the present study, Schein's (1990) concept of career orientations is explored as a component of intrinsic career exploration that activates individuals' extrinsic career exploration in the form of digital-era world of work awareness and career agility.

#### **Career orientations**

Research suggests that individuals' personal values (i.e. desirable goals and life aspirations) have become essential for career decisions and choices, and lifelong agentic career development in times of uncertain career prospects (Abessolo, Rossier, & Hirschi, 2017). In this regard, individuals' career orientations provide purpose and meaning to their career choices and behaviour (Abessolo et al., 2017; Coetzee & Schreuder, 2014; Rodrigues, Guest, & Budjanovcanin, 2013; Schein & Van Maanen, 2016). The master motivational values that underpin individuals' career orientations serve as criteria for subjective career success that act as an internal cognitive compass pulling individuals towards specific career choices and decisions (Abessolo et al., 2021).

Schein's (1990) eight types of career orientations (anchors) denote four clusters of career-values mindsets (Wils, Wils, & Tremblay, 2010): *careerist mindset* (associated with the general managerial competence career orientation), *protean mindset* (associated with the technical and functional competence, entrepreneurial creativity, pure challenge, and autonomy and independence career orientations), *social mindset* (associated with lifestyle and Service and dedication to a cause career orientations) and *bureaucratic mindset* (associated with the security/stability career orientation). The careerist

mindset of the general management competence orientation denotes self-enhancement as basic value (i.e. professional success, influence and power). The protean-mindset-associated career orientations allude to openness to change and agency (self-regulatory) values, a readiness for change and to autonomously pursue new challenging occupational and career challenges for personal growth and development. The social-mindset type of career orientations subscribes to human values of self-transcendence that emphasise social needs and benevolent connections. The bureaucratic mindset of the security and stability career orientation is associated with the basic human value of conservation (i.e. continuity, stability and bureaucratic links with others in the organisation; Abessolo et al., 2017; Schwartz et al., 2012; Wils et al., 2010).

Career orientations guide intrinsic career exploration which evokes a feeling of curiosity towards the type of job and career that would bring the most fulfilment and career success (Schein, 1990; Su, 2020). Assessment and conversational exploration of career orientation mindsets enliven or activate the epistemic curiosity needed to intentionally (purposefully) engage in extrinsic career exploration to not only gain more information about the digital-era world of work career options that fit one's career orientations but also to be career agile by proactively adapting and responding to changes that influence one's career success (Coetzee et al., 2021a; Grossnickle, 2016; Su, 2020).

#### Digital-era world of work awareness

Like career agility, digital-era world of work awareness is a person-in-environment construct of extrinsic career exploration (Jiang et al., 2019). In the present study, individuals' world of work awareness denotes their conscious, purposive cognitions that afford them access to information about the nature of work, occupations and jobs in the digital-era world of employment. Such information includes an understanding of the impact of technological advancement on job and employment opportunities, and the changing nature of work (Brown et al., 2018: Deloitte, 2021; Deloitte Insights, 2019; McKinsey Global Institute, 2015, 2016). Individuals' awareness of the changing world of work helps them gain information on potential new digitally driven occupational opportunities in their field of interest, and the new type of skills and knowledge they need to qualify for new forms of jobs and occupations (Brown et al., 2018; Coetzee et al., 2021b; Deloitte, 2021).

It stands to reason that individuals' cognitions and feelings about their preferred career orientations will be positively associated with the extrinsic career exploration cognitions of world of work awareness. Schein and Van Maanen (2016) suggest that the protean-type career orientations technical and functional competence, entrepreneurial creativity, pure challenge and Autonomy and independence career orientations may be especially open-minded towards and curious about the new career opportunities proffered by the

digital-era world of work. However, research on links between individuals' career orientations and the construct of digital-era world of work awareness is non-existent. The following research question ensued from this research gap:

**Research question 1:** Do individuals' career orientations predict their digital-era world of work awareness?

In the present study, it was also assumed that individuals' world of work awareness will enhance their career agility because of the information and knowledge they have about the world of work. World-of-work-aware individuals recognise the need for rapid Upskilling, reskilling and continuous learning for optimal adaptation to, and functioning within the digital-era employment market (Coetzee et al., 2021b; Kohl & Swartz, 2019). Digital-era world of work awareness is characteristic of the career agile mindset; individuals are able to rapidly learn, unlearn, relearn and adjust their personal worldviews, beliefs, career goals, interests and behaviour for re-achieving optimal person–environment congruence (Brown et al., 2018; Kohl & Swartz, 2019).

It further appears that some of the career orientations, such as the protean mindset type of career orientations, may also show a stronger link to individuals' career agility than, for example, the careerist, social and bureaucratic type of mindsets because of the underpinning values that direct career cognitions and actions. Individuals who ascribe to the protean-type career need for technical and functional competence (i.e. opportunities for continuous upskilling of one's expertise through challenging work), autonomy and independence (i.e. self-reliant navigation of world of work for self-expression), entrepreneurial creativity (i.e. readiness to discover and pursue new self-expression opportunities) and pure challenge (i.e. the pursuit of new self-challenging career opportunities) generally tend to demonstrate a career-agile interest in and awareness of changes in the world of work (Schein & Van Maanen, 2016). However, research on the associations between individuals' career orientations, digital-era world of work awareness and career agility is non-existent. The following research question was posed:

**Research question 2:** Do individuals' career orientations and their digital-era world of work awareness predict their career agility?

## Method

#### **Participants**

The participants were a randomly selected sample (*n* = 486) of South African distance learning undergraduate adult learners in the economic and management sciences field. The participants comprised of women (65%) and men (35%) with a mean age of 34 years (standard deviation [SD] 9.12 years). In line with the *South African Employment Equity Act* categorisation of race groups, the sample was represented by 85% black learners (African: 73%; Coloured: 7%; Indian: 5%) and 15% white learners. Seventy-two per cent of the

participants had full-time employment and 28% were unemployed.

#### **Measuring instruments**

#### **Career agility**

The 18-item career agility scale (CAS; Coetzee et al., 2021a) was utilised to measure the participants' career agility (e.g. 'I am updating my knowledge and skills to capitalise on new job opportunities created by accelerated technological developments'). Participants' responses are measured on a seven-point Likert-type scale (where 1: strongly disagree and 7: strongly agree). The CAS has proven internal consistency reliability (> 0.80) and construct validity (Coetzee et al., 2021a).

#### **Career orientations**

Schein's (1990) 40-item career orientations inventory (COI) was applied to measure the perceptions of the career selfconcept. The COI measures responses on a six-point Likerttype scale (where 1: not true at all for me and 6: always true for me). The COI identifies eight types of career orientations (Schein, 1990): (1) technical and functional competence (five items; e.g. 'I will feel successful in my career only if I can develop my technical and functional skills to a very high level of competence'); (2) general management competence (five items; e.g. 'I am most fulfilled in my work when I have been able to integrate and manage the efforts of others'); (3) autonomy and independence (five items; e.g. 'I dream of having a career that will allow me the freedom to do a job on my own way and on my own schedule'); (4) security and stability (five items; e.g. 'Security and stability are more important to me than freedom and autonomy'); (5) entrepreneurial creativity (five items; e.g. 'I am always on the lookout for ideas that would permit me to start my own enterprise'); (6) service and dedication to a cause (five items; e.g. 'I will feel successful in my career only if I have a feeling of having made a real contribution to the welfare of society'); (7) pure challenge (five items; e.g. 'I dream of a career in which I can solve problems or win out in situations that are extremely challenging'); (8) lifestyle (LS: five items; e.g. 'I would rather leave my organisation than to be put into a job that would compromise my ability to pursue personal and family concerns'). The COI is a well-established instrument with demonstrated construct validity and internal consistency reliability (Coetzee, Schreuder, & Tladinyane, 2014).

#### Digital-era world of work awareness

The 16-item measure of the digital-era world of work awareness scale (DWWAS: Coetzee et al., 2021b) was utilised (e.g. 'I have a clear picture of jobs and occupational opportunities made possible by new technological advancements in my field of study'). Responses are measured on a seven-point Likert-type scale (where 1: strongly disagree and 7: strongly agree). Research by Coetzee et al. (2021b) indicates construct validity and internal consistency reliability coefficients of  $\alpha > 0.78$  for the WWAS.

#### **Procedure**

The university's internal lime survey facilities were utilised for data collection. The participants were invited via their student emails with a URL link to the research questionnaire to voluntarily complete the online survey for research purposes.

#### Data analysis

Descriptive statistics, reliability coefficients and Pearson's product–moment correlations were calculated and analysed using IBM Corp. (2020) Statistical Package for the Social Sciences (SPSS) Version 27. Linear regression analysis was done by using Hayes's (2018) PROCESS Procedure for SPSS Version 3.5.3. The bootstrapping stringent lower level confidence interval (LLCI) and upper level confidence interval (ULCI) range not containing zero was used to interpret significant direct (prediction) effects at the 95% confidence interval (Hair, Black, Babin, & Anderson, 2010).

#### **Ethical considerations**

Ethics clearance for the research (ERC Reference: 2020\_CEMS\_IOP\_031) and permission to conduct the survey among the students (Ref #: 2020\_RPC\_051) were granted by the university. Participation was voluntary, anonymous, confidential and with informed consent to use the data for group-based research purposes.

#### **Results**

#### **Descriptive statistics**

Table 1 shows that all the scale variables had good reliability coefficients ( $\alpha \geq 0.74$ ) except for the technical/functional competence ( $\alpha = 0.60$ ), autonomy/independence ( $\alpha = 0.65$ ) and lifestyle ( $\alpha = 0.69$ ) career self-concept orientations. The correlations between career agility, world of work awareness and the career self-concept orientations were significant and positive ( $r \geq 0.16$  and  $\leq 0.53$ ;  $p \leq 0.001$ ; small to large practical effect). However, the general management career self-concept orientation had no significant correlation with the career agility variable.

# Career orientations as predictor of digital-era world of work awareness

The linear regression *F*-statistic estimate (see Witten, Hastie, & Tibshirani, 2013) reported in Table 2 was significant. The *F*-statistic model explained 32% ( $R^2 = 0.32$ ; large practical effect) of the variance in the construct. Table 2 shows that the Technical and functional competence ( $\beta = 0.32$ ; p = 0.000; LLCI = 0.21; ULCI = 0.45), autonomy and independence ( $\beta = 0.13$ ; p = 0.01; LLCI = 0.03; ULCI = 0.19) and pure challenge ( $\beta = 0.14$ ; p = 0.01; LLCI = 0.03; ULCI = 0.24) career orientations significantly predicted world of work awareness. In terms of research question 1, the results provided evidence that individuals' career orientations predict their digital-era world of work awareness.

**TABLE 1:** Descriptive statistics, reliability estimates and bivariate correlations (n = 486).

Variabl numbe	e Variable r	Cronbach's alpha	CR	Mean	SD	1	2	3	4	5	6	7	8	9	10
1	Career agility	0.83	0.83	5.52	0.87	-	-	-	-	-	-	-	-	-	-
2	World of work awareness	0.78	0.78	5.45	0.94	0.53***	-	-	-	-		-		-	-
3	Technical and functional competence	0.60	0.59	4.87	0.90	0.42***	0.52***	-	-	-	-	-	-	-	-
4	Service and dedication to a cause	0.78	0.78	4.78	1.02	0.27***	0.35***	0.60***	-	-	-	-		-	-
5	Pure challenge	0.76	0.76	4.76	0.99	0.41***	0.44***	0.67***	0.60***	-	-	-	-	-	-
6	Security and stability	0.76	0.76	4.63	1.05	0.16***	0.28***	0.43***	0.28***	0.34***	-	-	-	-	-
7	General management competence	0.74	0.75	2.79	1.41	0.07	0.24***	0.28***	0.24***	0.32***	0.26***	-	-	-	-
8	Entrepreneurial creativity	0.84	0.84	4.22	1.47	0.23***	0.30***	0.36***	0.43****	0.40***	0.10*	0.28***	-	-	-
9	Lifestyle	0.69	0.69	4.48	0.96	0.22***	0.38***	0.50***	0.47***	0.38***	0.37***	0.34***	0.36***	-	-
10	Autonomy and independence	0.65	0.65	4.53	1.10	0.26***	0.41***	0.50***	0.44***	0.42***	0.24***	0.33***	0.46***	0.38***	-

CR, composite reliability; SD, standard deviation.

**TABLE 2:** Results of prediction effects on digital-era world of work awareness (n = 486).

Variable	β	SE	t	p	LLCI	ULCI	Fp	R <sup>2</sup>
World of work awareness							28.60***	0.32
Technical and functional competence	0.32	0.06	5.42	0.000	0.21	0.45	-	-
General management competence	0.02	0.03	0.49	0.63	-0.04	0.07	-	-
Autonomy and independence	0.13	0.04	2.63	0.01	0.03	0.19	-	-
Security and stability	0.04	0.04	0.86	0.39	-0.04	0.11	-	-
Entrepreneurial creativity	0.05	0.03	1.16	0.25	-0.02	0.09	-	-
Service and dedication to a cause	-0.06	0.05	-1.21	0.23	-0.15	0.04	-	-
Pure challenge	0.14	0.05	2.55	0.01	0.03	0.24	-	-
Lifestyle	0.09	0.05	1.87	0.06	-0.004	0.18	-	-

SE, standard error; LLCI, lower level confidence interval; ULCI, upper level confidence interval.

**TABLE 3:** Results of prediction effects on career agility (n = 486).

Variable	β	SE	t	р	LLCI	ULCI	Fp	R <sup>2</sup>
Career agility							27.16***	0.34
World of work awareness	0.42	0.04	9.36	0.000	0.31	0.48	-	-
Technical and functional competence	0.13	0.06	2.12	0.04	0.01	0.24	-	-
General management competence	-0.11	0.03	-2.59	0.01	-0.12	-0.02	-	-
Autonomy and independence	0.01	0.04	0.13	0.90	-0.07	0.08	-	-
Security and stability	-0.03	0.04	-0.75	0.45	-0.10	0.04	-	-
Entrepreneurial creativity	0.03	0.03	0.75	0.45	-0.03	0.07	-	-
Service and dedication to a cause	-0.04	0.05	-0.76	0.45	-0.12	0.05	-	-
Pure challenge	0.20	0.05	3.70	0.000	0.09	0.28	-	-
Lifestyle	-0.03	0.04	-0.69	0.49	-0.12	0.06	-	-

SE, standard error; LLCI, lower level confidence interval; ULCI, upper level confidence interval.

### Career orientations and digital-era world of work awareness as predictors of career agility

The F-statistic in Table 3 was significant. The F-statistic model shows that digital-era world of work awareness and eight career orientations as predictor variables explained 34%  $(R^2 = 0.34; large practical effect)$  of the variance in career agility. In terms of research question 2, the results provided evidence that individuals' career orientations and their digital-era world of work awareness predict their career agility.

Table 3 shows that the world of work awareness variable ( $\beta = 0.42$ ; p = 0.000; LLCI = 0.31; ULCI = 0.48), the technical and functional competence ( $\beta = 0.13$ ; p = 0.04; LLCI = 0.01; ULCI = 0.24) and pure challenge ( $\beta$  = 0.20; p = 0.000; LLCI = 0.09; ULCI = 0.28) career orientations significantly predicted career agility. The general management competence career orientation ( $\beta = -0.11$ ; p = 0.01; LLCI = -0.12; ULCI = -0.02) had a significant and negative prediction effect on career agility.

#### **Discussion**

The study revealed important insights regarding the career orientation types Technical and functional competence, Autonomy and independence and pure challenge as explanatory antecedents of participants' digital-era world of work awareness. In addition, the results provided an indepth understanding of the contributory effect of the Technical and functional competence, pure challenge and general management, including digital-era world of work awareness on participants' career agility.

The career values underpinning the technical and functional competence, autonomy and independence and pure

<sup>\*</sup>  $p \le 0.05$ ; \*\*\*  $p \le 0.000$ .

<sup>\*\*\*</sup>  $p \le 0.000$ .

challenge career orientations allude to the protean mindset values of openness to change and agency (self-regulatory) values, a readiness for change, and to autonomously pursue new challenging occupational and career challenges for personal growth and development (Abessolo et al., 2017; Wils et al., 2010). Schein and Van Maanen (2016) argue that in the digital era, work for individuals who endorse the values of the Technical and functional competence career orientation will be central to the development of their technical expertise and talents. For the autonomy and independence and pure challenge career orientation types, technological advancement will uncover future jobs that provide more challenging and exciting problem solving, growth and development opportunities than ever (Schein & Van Maanen, 2016).

The findings suggest that individuals who attach meaning to the underpinning values of the protean-type career orientations are more prone to engage in extrinsic career exploration (i.e. actively gain knowledge of the impact of the digital era on job and employment opportunities, the need for continuous learning, reskilling and upskilling because of changing job requirements, and the need for career agile adaptation (Coetzee et al., 2021b). Contrary to the proteantype career orientations of technical and functional competence and pure challenge, the professional success and self-enhancement values of the careerist mindset (general management competence) seemed to explain lower levels of career agile behaviour. This may be attributed to the careerist need for power and responsibility and rapid upward career progress which may be somewhat more diffused and unpredictable in the virtualised, digital-era workplace (Reyes, Luna, & Salas, 2021; Schein & Van Maanen, 2016).

Participants' awareness of the digital-era world of work offered additional insight into the career agility mindset. The positive associations elucidated participants' propensity for epistemic curiosity into the world of work changes, resulting in career agile external career exploration, self-efficacious career goal setting, and intentional and optimistic career navigation of new chance career and development opportunities proffered by technological advancement (Coetzee, 2021a).

The findings corroborate career exploration research showing an interplay between self-insight into career values and extrinsic exploration of the career environment that may produce positive career and work outcomes (Jiang et al., 2019; Lent, Ireland, Penn, Morris, & Sappington, 2017). Self-environment career exploration is viewed as an adaptive behavioural attribute that leads to positive career outcomes (Jiang et al., 2019; Lent & Brown, 2013; Savickas, 2013).

# Implications for purpose-enhancing career exploration counselling practice

The central implication for purpose-enhancing career exploration counselling from this study is the challenge to help individuals translate the intrinsic exploration of, and insight into, career orientation values into self-regulatory extrinsic career exploration activity. Such actions involve gaining knowledge about the changing nature of jobs and careers in the digital-era world of work and the career agility mindsets they need to successfully craft new, unplanned career opportunities for sustainable employability. Although individuals who subscribe to protean-mindset career orientations (technical and functional competence, pure challenge and autonomy and independence) may be more susceptible to such activity, career counselling should focus on guiding individuals not acquiescing to protean-like career values to become more world of work aware and career agile. Career research suggests that the combination of both career values and self-regulatory agency (e.g. career agility) has a stronger prediction effect on positive responses to change than either attribute alone (Briscoe, Hoobler, & Byle, 2010; Hall et al., 2018). Inadequate self-regulatory agency with a strong career values drive may result in a rigid career orientation and inhibit career proactivity (Briscoe & Hall, 2006). Individuals may, through purpose-driven intrinsic and extrinsic career exploration techniques, learn to explore apart from a dominant career orientation also their secondary and tertiary career orientations, and how these career values either enable or thwart their world of work awareness and career agility.

The new insights and contributions of the current study should be seen in the light of the exploratory, cross-sectional research design. No causal effects could be established between the variables, only the direction and magnitude of associations. The sample was limited to adult learners in the economic and management sciences field. Future research may investigate the associations across different occupational fields and in longitudinal studies of true causal processes. Future qualitative studies may also investigate the application of the COI, DWWAS and CAS in career exploration counselling and report on client narratives around the usefulness of these assessments in purpose-driven career development.

#### Conclusion

The present study introduced three constructs relevant to intrinsic career (career orientations) and extrinsic career (world of work awareness and career agility) exploration in purposive career exploration. The empirical evidence of direct associations between these constructs offers promising support for applying principles of career exploration in today's digital-era career counselling sphere.

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The author has declared that no competing interests exist.

#### **Author's contributions**

I declare that I am the sole author of this research article.

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#### Data availability

Data for this study are available only upon approval of the research institution's research ethics committee, with formal reasonable request to the author.

#### Disclaimer

The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy or position of any affiliated agency of the author.

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