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A MALAY TRANSLATION AND CONTENT VALIDITY INDEX OF THE CONSIDERATION OF FUTURE CONSEQUENCES – 14 SCALE

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ABSTRACT

This study examines the content and construct validity of the Malay-translated version of the consideration of future consequences (CFCs) 14 adopted by Joireman et al. (2012). This study was conducted among public service leaders at three ministries in Malaysia. The Malay-translated version of CFCs-14 was analysed to establish the content and construct validity of the items in measuring CFCs in the Malaysian context. The content validity analysis results reported that the scale level index (S-CVI/UA) for the CFCs scale was 0.120. Further, the item level index (I-CVI/Ave) value for all items on the scale was 0.93. Using SPSS version 22 and SMARTPLS version 3.2, the construct validity analysis revealed two-factor of CFCs. This suggests the usability of CFCs-14 in gauging CFCs construction. The results provide empirical evidence regarding the validity of the CFCs items, indicating that the Malay-translated version of CFCs-14 is suitable for Malaysian studies. Implications of the findings were also discussed.

Keywords: *Consideration of future consequences, content validity index, construct validity, public sector, Malaysia*

INTRODUCTION

According to Kooij et al. (2018), the ability of an individual to plan, anticipate and foresee their future desired outcomes is significant in sustaining and improving his or her well-being, motivation, and behaviour. Future time perspective is crucial to enhance efficiency and effectiveness and increase the competencies of the organisational members in the future. Rappange et al. (2009) pointed out that scholars (e.g., Frank, 1939; DeVolder & Lens, 1982; Kastenbaum, 1961; Lamm, Schmidt, & Trommsdorff, 1976) have extensively studied the concept of future time perspective for quite some time. The time perspective has been scrutinised widely, attracting scholars' attention to develop a scale on this (e.g., Strathman et al., 1994; Joireman & King, 2016; Lee, Yun, & Kim, 2017). In line with that, measures on time perspective have been established, for instance, Consideration of Future Consequences, the Zimbardo Time Perspective Inventory, and the Temporal Focus Scale.

In capturing the unique aspect of forthcoming thought, a new scale of future time orientation had been developed by Strathman et al. (1994), in line with the concepts of future orientation and future time perspective that have been established by prior researchers, such as deVoider and Lens (1982) and Lamm, Schmidt, and Trommsdorff (1976). The scale, known as CFCs, integrates both immediate and future orientation, whereby it is postulated that an individual's current behaviour would influence future potential outcomes. The construct encompasses 12 items, seven representing immediate concerns and five representing future concerns. CFCs are a measure typically used to assess future concerns that provide individuals with a beginning of their story to the end, which involves the aspect of time perspectives. According to Rachlin (2000), most human self-control generally involves sacrificing short-term happiness, such as those that might direct their earnings today into a retirement fund

to succeed in their long-term well-being (e.g., retiring with enough savings to live comfortably). To respond to this assumption, personality psychologists embarked on studies to understand the role of self-control, an individual trait connected to an individual's concern on time perspective, focusing on immediate versus future consequences (Joireman et al. 2008).

CFC has been used widely to examine individual differences in time perspective because it yields consistent results in the business field (Lee et al., 2017). In terms of measurement, Joireman and King (2012) adopted the measurement of CFC from Strathman et al. (1994). However, they extended the measurement of CFCs, known as CFCs-14, by adding two future-oriented items. In order to validate the CFCs-14 construct, exploratory and confirmatory factor analyses were conducted, and it was found that the CFCs-14 scale showed two highly reliable factors (CFCs-Future and CFCs-Immediate; αs from 0.80 to 0.84). This means that the addition of two items for future orientation in CFCs-14 helps to increase the reliability of the measure. Even though CFCs-14 has been examined in terms of construct validity, there is a need to examine the content validity of the measure through the content validity index (CVI), as Polit and Beck (2006) suggested. According to them, CVI is "the degree to which a sample of items, taken together, constitutes an adequate operational definition of a construct." This is crucial to establish a more conclusive result on the measure's validity. Therefore, the main aim of this study is to examine the content validity and construct validity of the Malay-translated version of CFCs-14 based on Joireman et al. (2012).

LITERATURE REVIEW

The Malaysian Public Service Leader in the Context of CFCs

Leadership in public service is critical to ensure the success of public administration. According to Ingraham and Getha-Taylor (2004), effective leadership is essential to organisational effectiveness. This is because good leaders in the workplace promote a healthy organisational culture, increase motivation, keep the organisation's mission and goals focused, and strive for higher levels of productivity and performance (Ingraham & Getha-Taylor, 2004). The public service is usually a very large organisation that plays an important role in formulating, managing, and implementing government policies. According to Kanapathy and Hazri (2013), the executive structure supported by the government machinery is called Malaysia Public Service (MPS). Its core functions are to provide basic services such as government administration, judiciary, public security, national defense, health, and education. According to Article 132 of the Malaysian Federal Constitution, the public service can be defined as"consists of the general federal public service, the state public services, the general public services, the education services, the judicial and legal services, the police and the armed forces. "The Malaysia Public Service (MPS) is assorted. It encompasses various levels of public administration from some, if not all, classifications of schemes of service (Mat Ariffin & Othman, 2018). Moreover, as has been studied previously (e.g., Ahmad Sarji, 1996), all public administration employees from all ranks are required to execute and administer laws enacted by parliament at all levels of government.

According to Slawinski and Bansal (2015), the roles of leaders are critical to promoting future organisational growth, especially in terms of thinking, acting, and being able to respond to multiple influences in the internal and external environment over a long time horizon. This is because the ability of leaders to manage the intertemporal tension associated with balancing short-term goal considerations with longer-term goals is critical to the long-term viability of an organisation. Future perspective has become an essential feature for organisations to maintain long-term viability and competitiveness in the era of a dynamic global economy (Lee et al., 2017; Shrivastava, 1995). McInerney (2004) noted that a sense of future purpose is critical to inspiring people to be highly engaged in current activities, which can help create competitive advantages for desirable future outcomes. As Vilar et al. (2020) note, the study of CFCs has not yet been explored primarily in the context of Asian countries. Recently, however, a study by She, Ma, and Fomani (2021) examined a psychometric assessment of CFC among young adults in Malaysia. However, the present study examines CFC among leaders in the public sector. The study of CFC among public sector leaders still needs to be explored among Asian public service leaders to identify their credibility and ethical responsibility as decision-makers.

The Conceptualisation of Consideration of Future Consequences

Future orientation has been considered as the general preoccupation of future events (Strathman et al., 1994). According to them, this concept revolves around future orientation and time perspective (FTP). Kastenbaum (1961) defined FTP as a "general concern for future events" (p.204), while Wallace (1956) described FTP as "the length of the future time over which one conceptualises personalised future events" (p. 240). Hence, in expanding the concept from the definition of FTP from earlier scholars, Strathman et al. (1994) proposed another form of future orientation called CFCs. This concept is about "the extent to which individuals consider the potential outcomes of their current behaviours and the extent to which these potential outcomes influence them." Therefore, we adopt the definition by Strathman et al. (1994), which refers to individual differences in the decision on immediate versus future consequences of their action. Strathman et al. (1994) stated that the evolution of CFCs has emerged over the last several decades. They also asserted that the advancement of scientific technology and medical understanding at that particular time may have influenced individuals' consideration of future outcomes based on their current activities. In other words, CFCs can be considered a motivational construct that affects individuals' consideration of their current behaviour's immediate and future consequences (Strathman et al., 1994).

Toepoel (2010) asserted that the scale of CFCs is developed to measure individuals' consideration regarding the future implication of their immediate actions. For instance, individuals who are high in CFCs believe engaging in certain behaviour is worthwhile due to future distant benefits, even though their immediate outcomes are somewhat desirable (Toepoel, 2010). This suggests that individuals who focus on future outcomes are more willing to sacrifice their immediate well-being to reap future benefits. CFCs are a unique construction because it does not measure a general preoccupation in a specific future event. Instead, it focuses on the conflict within individuals that must endure while contemplating the consequences of the present behaviour and future or immediate outcomes. Previous scholars (e.g., Milfont & Gouveia, 2006; Rabinovich, Morton, & Postmes, 2010) stated that future time orientation is connected to the increment incidence of pro-environmental behaviours. Joireman (2005) explained that the uncertainties that influenced environmental issues would necessarily affect the expectations and projections of the future. Furthermore, as reported by Toepoel (2010), individuals who can decide to focus on immediate or future consequences are believed to be relatively stable in terms of their characteristics.

In the era of a volatile global economy, the future-time perspective has become an integral feature for organisations to ensure sustainability and competitiveness in the long run (Lee et al., 2017; Shrivastava, 1995). McInerney (2004) asserted that a sense of purpose of future perspective is important in motivating individuals to be highly engaged in current activities, which can be instrumental in creating competitive advantages for desirable future outcomes. Slawinski and Bansal (2015) pointed out that in order to strengthen organisational growth in the future, leaders' roles are of paramount importance, particularly in terms of thoughts, actions, and capabilities to react to various forces in the internal and external environment with an extended time horizon in mind. This is because the sustainability of organisations depends on how leaders manage the inter-temporal tension inherent to balancing short-term goal considerations and longer-term aspirations.

According to Strathman et al. (1994), assessing CFCs is deemed important due to people's dissimilarities in time perspective. This determines how individuals' behaviours are influenced by their general preoccupation with immediate or future events. Joireman et al. (2008) asserted that individuals with a high level of CFCs are inclined to set effective performance goals at work and place a high value on opportunities for career growth, which is a prerequisite in enhancing the individuals' task performance. CFCs have been studied with a broader range of personal and societal relevant behaviours, and the construct has undergone significant development (Joireman & King, 2016). Prior empirical studies reported a positive connotation of CFCs on self-control (Ein-Gar, Goldenberg, & Sagiv, 2012; Joireman et al., 2008), intelligence (Basile & Toplak, 2015), FTP (Zimbardo & Boyd, 1999), and the need for recognition (Basile & Toplak, 2015; Strathman et al., 1994).

Empirical evidence from the works of literature has substantiated the significant link between individuals'

time perspective and an array of attitudinal and behavioural outcomes, such as health behaviours (Piko & Brassai, 2009), recreational activities (Shores & Scott, 2007), environmental behaviour (Strathman et al., 1994), work motivation (Seijts, 1998), aggression (Joireman, Anderson, & Strathman, 2003) and many more. Also, Daugherty and Brase (2010) and Gick (2014) examined CFCs with the Big Five Traits of conscientiousness, while Zuckerman et al. (1993) examined CFCs with alternative five traits, and Joireman et al. (2003) probed CFCs with sensation seeking. Regarding criterion outcome, CFCs were reported to have a moderate correlation between locus of control, optimism, and self-efficacy (Strathman et al., 1994). Furthermore, CFCs was also reported to be associated with leadership effectiveness (e.g., Zhang, Wang & Pearce, 2014), organisational performance and innovation (e.g., Wang & Bansal, 2012), as well as various other individual attitudes and behaviour (e.g., Joireman & King, 2016). Interestingly, prior researchers have also used CFCs (e.g., Adams & Nettle, 2009; Moore & Dahlan, 2008; Morison et al., 2010) in explaining anticipated regrets. Recent evidence suggests that CFCs may induce people's future perspectives and outcomes because the effects of CFCs fluctuate depending on the situational context (Lee et al., 2017). Besides that, Matterson et al. (2000) stated that different situational contexts might influence an individual's future perspective. This emerges due to the organisational environment experienced by individuals, which ultimately affect the individuals' attitude, behaviours, and various job-related outcomes.

METHODOLOGY

Procedures and Measure

Content Validity Analyses

The items in CFCs-14 were adopted from Joireman et al. (2012) and originally adapted from Strathman et al. (1994). Strathman et al. (1994) initially developed 12 items to evaluate individual differences, also called CFCs. In most prior studies, CFCs is treated as a unidimensional scale. In 2012, Joireman and colleagues improved the internal reliability of CFCs by adding two items (items 13 and 14) to the future-oriented subscale. They also proposed separate subscales for future and immediate consequences, labelled CFCs-14. Following this, several empirical kinds of research (e.g., Adams, 2012; Joireman et al., 2008; Petrocelli, 2003; Rappange et al., 2009; Toepel, 2010) have reported that a two-factor model is better in explaining CFCs due to its comprehensiveness in gauging the concept. Table 1 shows the original items for consideration of future consequences.

The adapted CFCs measurement was back-translated into Malay (Joireman et al. 2012). The study was conducted in the public sector. Hence, one practitioner in the public sector and two bilingual experts had involved in determining the items that need to be refined to suit the Malaysian public service context. This step is crucial to ensure no culture-specific language or content. Then, the items were translated using the back-translation procedure. Table 2 depicts the Malay-translated items for consideration of future consequences. According to prior studies, e.g., Brislin (1970), Werner and Campbell (1970), and Geisinger (2003), at least two different bilingual language experts are needed in order to back-translated the items. Specifically, one expert translated the original items into Malay, and another re-translated the translated items into English without referring to the original items. Following Geisinger (2003), the language translation quality was observed to foresee the accuracy of the back-translated measurement with the original version. The researchers discussed and verified back-translated items with practitioners from the public sector to ensure the suitability of all items in the public sector context.

In the content validity analysis, we provided an adequate operational definition of a construct before assessing the content validity of the items. This study used the definition by Strathman et al. (1994), who defined consideration of future consequences as "the extent to which people consider the potential distant outcomes of their current behaviours and the extent to which these potential outcomes influence them." Early scholars, such as Waltz and Bausell (1981), suggested that content validity analysis is typically rated on a 4-point ordinal scale. Likewise, Lynn (1986) stated that the items could be rated on a 3- or 5-point ordinal scale to avoid a neutral and ambivalent midpoint. Prior researchers (e.g., Waltz & Bausell, 1981) suggested the usability of a 4-point rating scale. In line with the prior study by Davis (1992), there are some variations in labelling the four ordinal points.

Nevertheless, the most common scale used is 1 = Not Relevant, 2 = Somewhat Relevant, 3= Quite Relevant, and 4 = Highly Relevant. Therefore, CFC items were rated based on the four ordinal points with regular labelling,

Table 1 Original items for consideration of future consequences

1. I consider how things might be in the future and try to influence those things with my day-to-day behaviour. **(F)**
2. Often, I engage in a particular behaviour in order to achieve outcomes that may not result for many years. **(F)**
3. I only act to satisfy immediate concern, figuring that the future will take care of itself. **(I)**
4. My behaviour is only influenced by the immediate (i.e., a matter of days or weeks) outcomes of my actions. **(I)**
5. My convenience is a big factor in the decisions I make or the actions I take. **(I)**
6. I am willing to sacrifice my immediate happiness or well-being in order to achieve future outcomes. **(F)**
7. I think that it is important to take warnings about negative outcomes seriously even if the negative outcome will not occur for many years. **(F)**
8. I think that it is more important to perform a behaviour with important distant consequences than a behaviour with less important immediate consequences. **(F)**
9. I generally ignore warning about possible future problems because I think that the problems will be resolved before they reach a crisis level. **(I)**
10. I think that sacrificing now is usually unnecessary since future outcomes can be dealt with at a later time. **(I)**
11. I only act to satisfy immediate concerns, figuring that I will take care of future problems that may occur at a later date. **(I)**
12. Since my day-to-day work has specific outcomes, it is more important to me than behaviour that has distant outcomes. **(I)**
13. When I make a decision, I think about how it might affect me in the future. **(F)**
14. My behaviour is generally influenced by future consequences. **(F)**

Note: F = Future; I = Immediate
Response choices are:
1= Extremely uncharacteristic; 2=Uncharacteristic; 3=Somewhat uncharacteristic ; 4=Uncertain ; 5=Somewhat characteristic; 6=Characteristic; 7= Extremely characteristic

Table 2 Malay-translated items for consideration of future consequences

1. Saya ambil kira apa yang akan berlaku pada masa hadapan dan cuba menghadapinya melalui tingkah laku saya. **(F)**
2. Selalunya gelagat kerja saya menjurus ke arah pencapaian matlamat jangka panjang. **(F)**
3. Saya hanya bertindak untuk memenuhi keperluan semasa, dengan harapan bahawa semua perkara pada masa hadapan akan tercapai dengan sendirinya. **(I)**
4. Gelagat saya hanya dipengaruhi oleh apa yang akan saya capai serta merta iaitu hari atau minggu.**(I)**
5. Keselesaan saya adalah faktor paling penting dalam keputusan yang saya buat atau tindakan yang saya ambil.**(I)**
6. Saya bersedia untuk mengorbankan kebahagiaan atau kesejahteraan saya sekarang demi mendapatkan hasil pada masa hadapan. **(F)**
7. Saya fikir amat penting untuk beringat tentang perkara negatif yang akan terhasil walaupun perkara tersebut tidak akan muncul dalam masa terdekat. **(F)**
8. Saya fikir gelagat kerja bagi memenuhi masa hadapan adalah lebih penting berbanding gelagat kerja yang memenuhi keperluan pada masa sekarang. **(F)**
9. Selalunya saya mengabaikan petanda tentang kemungkinan berlakunya masalah pada masa hadapan, sebab saya fikir masalah berkenaan akan dapat diselesaikan sebelum ia mencapai tahap kritikal.**(I)**
10. Saya fikir tidak perlu berkorban pada masa sekarang, memandangkan perkara-perkara yang berlaku pada masa hadapan boleh ditangani kemudian. **(I)**
11. Saya hanya bertindak untuk memenuhi keperluan semasa dengan andaian bahawa saya akan dapat menangani masalah yang akan datang kemudian hari. **(I)**
12. Tugas-tugas seharian saya lebih penting kerana saya perlu mencapai objektif tertentu berbanding dengan tugasan yang memberi hasil dalam jangka masa yang panjang. **(I)**
13. Apabila saya membuat keputusan, saya mengambil kira kesan keputusan tersebut terhadap saya pada masa hadapan. **(F)**

Note: F = Future; I = Immediate
Response choices are: 1 = amat tidak menepati; 2 = tidak menepati; 3 = kurang menepati; 4 = tidak pasti; 5 = hampir menepati; 6 = menepati; 7 = amat menepati

as Davis (1992) suggested. Lynn (1986) suggested that a minimum of three experts is required for the content validity analysis to be conducted. Therefore, three Malaysian academics participated as content experts in rating the CFC items. These individuals were chosen based on their expertise in organisational behaviour. They were also asked to rate each item's relevancy and appropriateness in measuring the underlying construct. To calculate the content validity score, we computed the I-CVI in which the sum of values given by the experts to each item was then divided by the number of content experts.

Construct Validity Analyses

This study was conducted among public service leaders in the Malaysian public sector. In order to minimise the threat of common method variance (CMV), this study follows a suggestion from Chang et al. (2010) mentioned that administrative and statistical strategies need to implement in the current study. First of all, researchers provided a cover letter to specify the main reason for the current study; guaranteed confidentiality and anonymity of the respondents were attached. Secondly, respondents were informed that there were no right and wrong answers and were encouraged to respond as truthfully as possible. Thirdly, this study did not mention and indicate in both cover letters and sections in the questionnaires what the items intended to measure. In fact, general instruction was given in each section of the questionnaires to facilitate respondents in answering the items.

The CFCs is a two-dimensional construct measured by 14 items. These items were adopted from Joireman et al. (2012) and originally adapted from Strathman et al. (1994). All items were rated on a seven-point Likert scale; namely, 1= extremely uncharacteristic, 2= uncharacteristic, 3= somewhat uncharacteristic, 4= uncertain, 5= somewhat characteristic, 6= characteristic, and 7= extremely characteristic.

A total of 967 questionnaires were distributed, and 250 were returned. However, only 205 were usable for data analysis. Multivariate outliers were conducted by computation of Mahalanobis Distance. 31 cases were deleted because the Mahalanobis Distance values exceeded 29.141. Therefore, upon deletion, 174 cases remained for data analysis. The reliability analysis was conducted to gather Cronbach's alpha reliability value.

To further evaluate the psychometric properties of the CFCs construct, exploratory factor analysis (EFA) was done to gain the initial validity evidence. The EFA was conducted to examine whether the responses gathered can be grouped according to the hypothesised factors. This was based on Bryne (2005), Hair et al. (2006), Kim and Muller (1978), and Tabachnick and Fidell (2007). Therefore, EFA using the principal axis factoring with direct, oblique rotation was conducted to analyse the factor structure of the CFCs construct. Confirmatory factor analysis (CFA) was also conducted for CFCs-14 scales to compare the fit of a one-factor and a two-factor model of the CFCs construct (Joireman et al., 2012). A holistic approach in assessing the suitability of the data for factor analysis, as suggested by Field (2009), was utilised by Joireman and colleagues (2012) in substantiating the validity of the CFC-14 scale. The variance explained for two factors of CFC-14 explained 51.2% of the variance (Joireman et al., 2012). In addition, the comparative result of the CFA for two-factor (versus one–factor) models reported that the two-factor model is suitable and significantly better than the one-factor model ($SB\chi 2\Delta$ (1) = 38.97, $p < .001$) (Joireman et al., 2012). Besides that, the Cronbach's alpha for internal reliability of seven items CFC-Future and seven items CFC-Immediate subscales (CFC-14 scale) were high, with 0.80 and 0.84, respectively, compared to the original five items CFC-Future subscale, which recorded a low Cronbach's alpha value ($\alpha = .70$) (Joireman et al., 2012).

RESULTS

Content Validity Analyses

We evaluated the content validity of the CFCs-14 by assessing its content validity in terms of the content validity index (CVI) based on Polit and Beck (2006) and Polit, Beck, and Owen (2007). CVI is crucial to provide empirical evidence and extensive information on the scale's reliability and validity when developing new measures (Polit & Beck, 2006). Besides that, CVI is an imperative analysis for the researcher to examine whether the instrument has valid items to measure a certain construct (Polit & Beck, 2004). When new measures are developed, it is necessary to provide extensive information on the scale's reliability and validity (Polit & Beck, 2006). Waltz, Strickland, and Lenz (2005, p.155) highlighted that the CVI analysis is crucial for researchers to be aware that "whether or not the items

sampled for inclusion on the tool adequately represent the domain of content addressed by the instrument."

Item level index or I-CVI of each item on the scale was computed to measure the S-CVI of CFCs latent construct. Polit and Beck (2006) mentioned that results from I-CVI are required to guide researchers in revising, deleting, or substituting items. Nevertheless, research reports do not usually provide information about I-CVI values.

This is because, according to Polit and Beck (2006), I-CVIs value tends to be reported in methodological studies focusing on content descriptions, compared to scale level index or S-CVI, where it most often is reported in scale development studies. After all, it reflects where the actual problem lies.

Table 3 depicts the rating of relevance for three experts on the CFCs-14. In this study, one expert rated all items as relevant, while the remaining two rated 13 out of 14. However, the item judged as irrelevant differs from one expert to another. Given that the definition requires a universally congruent rating by the experts, the S-CVI/UA in this study would be 0.120. Only 12 of the 14 items (except for items 5 and 10) received a relevance rating of 3 or 4 from all the experts. The value of S-CVI/AVE for all items on the scale is 0.95. It is important to note that the S-CVI/AVE is similar to the average congruence percentage index (ACP) index. As Waltz, Strickland, and Lenz (2005) suggested, the cut-off point for ACP should be at least 0.90, the standard criterion for S-CVI acceptability. Hence, based on the results, the content validity for CFCs-14 by Joireman et al. (2012) was established.

Table 3 Content validity of CFCs-14

Items	Expert 1	Expert 2	Expert 3	Expert in Agreement	Items CVI
CFCs-1	✓	✓	✓	3	1.00
CFCs-2	✓	✓	✓	3	1.00
CFCs-3	✓	✓	✓	3	1.00
CFCs-4	✓	✓	✓	3	1.00
CFCs-5	✓	—	✓	2	0.67
CFCs-6	✓	✓	✓	3	1.00
CFCs-7	✓	✓	✓	3	1.00
CFCs-8	✓	✓	✓	3	1.00
CFCs-9	✓	✓	✓	3	1.00
CFCs-10	—	✓	✓	2	0.67
CFCs-11	✓	✓	✓	3	0.67
CFCs-12	✓	✓	✓	3	1.00
CFCs-13	✓	✓	✓	3	1.00
CFCs-14	✓	✓	✓	3	1.00
				Average I-CVI=	0.93
				S-CVI/UA =	0.120
Proportion relevant:	0.93	0.93	1.00	Mean expert proportion=	0.95

Note: I-CVI, item-level content validity index.
S-CVI/UA, Scale-level content validity index, universal agreement calculation method

Construct Validity Analyses

Demographic Results of the Respondents

This study's respondents comprised 60.9% female and 39.1% male. 48.3% of the respondents were between 31 and 40 years old, while 3.4% were between 51 and 60. Since public officers in Malaysia are predominantly Malay populated, 96% of the respondents were Malays. Only 1.7% were Chinese, 1.7% were of other ethnicities, and 0.6% were Indian. The majority of the respondents, or 72.4%, were married, 25.3% were single, and only 2.3% were divorced. Most of the respondents, or 56.3% were bachelor's degree holders, and in terms of the type of employment, 99.7% of them were employed permanently.

Reliability and Exploratory Factor Analysis (EFA)

Table 4 depicts the result of the internal consistency reliability, mean, and standard deviation for the instrument under study. Based on the findings, the values of Cronbach's alpha were 0.867 and 0.923 for CFC-Future and CFC-Immediate constructs, respectively. EFA using principal axis factoring with oblique rotation was used to examine the factorial validity of the measure. The EFA results yielded two-dimensional factors (i.e., CFC-Future and CFC-Immediate) of the CFCs construct. The total variance explained was 57.599, while the KMO value was 0.870. The factor loadings for all items ranged from 0.587 to 0.906.

Table 4 Summary statistics of CFCs and Cronbach's Alpha

Constructs	Items	Mean	SD	Cronbach's alpha
CFC-Future	7	5.601	0.623	0.867
CFC-Immediate	7	4.274	1.257	0.923

Table 5 EFA for CFCs

Items	Factor 1	Factor 2
CFCs-1		0.608
CFCs-2		0.621
CFCs-3	0.744	
CFCs-4	0.766	
CFCs-5	0.587	
CFCs-6		0.666
Items	**Factor 1**	**Factor 2**
CFCs-7		0.686
CFCs-8		0.735
CFCs-9	0.823	
CFCs-10	0.895	
CFCs-11	0.906	
CFCs-12	0.758	
CFCs-13		0.729
CFCs-14		0.724
Total Eigenvalues	4.990	
Percentage of Variance Explain (%)	33.234	3.839
KMO	0.870	24.365
Total Variance Explain (%)	57.599	

Note: Factor 1= CFC-Immediate and Factor 2 =CFC-Future.

Table 6 Composite reliability and variance extracted (VE) for CFC-14

Construct/ Dimensions	Items	Standardised loadings	(Sum of standardised loadings)2	Number of items	Composite Reliability	Average Variance Extracted
Consideration of future consequences (Future Scale)	CFC6	0.827				
	CFC7	0.629				
	CFC8	0.906				
	CFC13	0.636				
	CFC14	0.690				
Total		**2.861**	**8.185**	**5**	**0.860**	**0.556**
Consideration of future consequences (Immediate Scale	CFC3	0.790				
	CFC4	0.813				
	CFC5	0.683				
	CFC9	0.847				
	CFC10	0.904				
	CFC11	0.912				
	CFC12	0.824				
Total		**5.773**	**33.328**	**7**	**0.938**	**0.685**

Composite reliability (CR) and average variance extracted (AVE) values were examined to establish the instrument's construct validity further. Using PLS-SEM, confirmatory factor analysis was conducted. According to Hair et al. (2006), construct validity aims to observe a set of items that converges on the theorised latent construct, which these variables were designed to measure. Based on Hair and colleagues (2006), the value of CR should be greater than 0.6, while the value of AVE should be above 0.5. CR value that is lower than 0.6 indicates that the items of the variable do not consistently measure the hypothesised latent construct, while items with 0.6 or higher demonstrate that the items consistently represent the proposed latent construct. An AVE value that is below 0.5 indicates that more errors remain in the items than the variance explained (Hair et al., 2006).

Table 6 illustrates the composite reliability and variance extracted for both CFC-I and CFC-F scales. The composite reliability for CFC-I and CFC-F were 0.938 and 0.860, respectively. The AVE for CFC-I was 0.685, and

CFC-F was 0.556. This is in line with the suggestion by Hair et al. (2006) that the AVE should be greater than 0.5 to establish an adequate convergence of the items.

DISCUSSIONS, IMPLICATIONS, AND CONCLUSION

The objective of this study is to determine the content validity and construct validity of the Malay-translated version of the CFCs-14 using the measurement of Joireman et al. (2012). The instrument, which was adapted from the original work of Strathman et al. (1994), was translated into the Malay language (see Appendix for Malay-translated CFC items). CFCs are defined as "the extent to which individuals consider the potential outcomes of their current behaviours and the extent to which these potential outcomes influence them." In essence, the concept refers to individual differences in the decision on immediate versus future consequences of their present action. Given the importance of the concept in understanding human action and behaviour, the measurement of the construct is deemed necessary. Furthermore, to expand the measure's utility, the items were back-translated into the Malay language, and the content and construct validity of the measure were examined.

This instrument is suitable for use in the Malaysian study because the findings provided evidence of content validity and construct validity for consideration of future consequences. This study also has ramifications for the Malaysian public sector regarding leaders considering future time perspectives. Even though consideration of future consequences is a well-established tool for assessing an individual's time perspective, it is supposed to have a valid Malay version tool for locals, especially in the context of the Malaysian public sector. This is because the scale developed using a foreign language version may result in inaccurate and misleading information due to several factors like linguistic, geographical, and cultural barriers (Kamaluddin et al., 2018). In light of this, this study was devoted to adapting a valid and reliable Malay version of CFCs. In order to accurately represent the concept being studied, a sample of Malaysian public sector leaders was selected for this study.

The result of the content validity analysis of CFCs-14 demonstrated that the items are valid in measuring CFCs because the value of S-CVI/Ave for all items was above the acceptable limit. The evidence of good CVI was attributable to the rigorous assessment of the items in the CFCs-14. All the items were scrutinised to ensure that each question measures the underlying latent factor it purported to measure. Furthermore, decentralisation and back-translation processes were conducted. The thoroughness in refining the items has yielded good CVI results, indicating that the content validity of the Malay-translated version of CFCs-14 was established.

The construct validity of the Malay-translated version of CFCs-14 was also examined. Two CFC dimensions were supported based on the exploratory and confirmatory factor analysis results. This finding was consistent with the previous study by Joireman et al. (2012), who examined individual differences in consideration of future consequences by testing whether the individual differences focus on their immediate or future behaviour. The findings of the current study indicated that all factor loadings in the exploratory factor analyses for two dimensions of CFC (i.e., immediate and future) were above 0.6. Following Hulland (1999), Truong and McColl (2011), and Chen and Tsai (2007), the factor loadings should be greater than 0.5 for better results, while Chin, Gopal, and Salisbury (1997) and Hair et al. (2006) stated that the threshold value for the standardised factor loadings is 0.6. In line with these assertions, all of the item loadings for the CFCs measure were considered valid as they are within the acceptable limit of 0.6. The average variance extracted (AVE) and composite reliability (CR) were examined to assess the convergent validity of the dimensions. According to Barclay, Higgins, and Thompson (1995), the values of AVE for each construct should be greater than 0.50. Hair et al. (2014) also mentioned that the AVE value that is less than 0.50 indicates that more errors remain in the items than the variance explained by the construct. Based on the findings, the AVE value for future CFCs was 0.556 and immediate CFCs was 0.685. Both values are above the cut-off point of 0.5. Further, the CR values for future and immediate CFCs were 0.860 and 0.938, respectively. Hair et al. (2010) and Hair et al. (2014) suggest that the value of CR for each construct should be greater than 0.70. Therefore, the findings from the present study fulfilled the requirement.

One important theoretical implication of this study would be in terms of content and construct validation

of the Malay-translated version of CFCs-14. Content and construct validity are crucial to ensure that more meaningful results can be elicited from research. Furthermore, content and construct validation could be of substantial value to the theoretical domain in the related fields of study. Given the limited empirical scrutiny on content and construct validation in the Malaysian context, this study moved one step ahead by providing evidence of the psychometric properties of the Malay-translated CFCs scale. Taken together, this study assessed the content and construct validity of the Malay-translated version of CFCs in the context of the public service sector in Malaysia. This study pioneered invalidating the Malay-translated version of CFCs-14. Most importantly, the current research fills in the void by providing a Malay-translated version of the CFCs-14 measure for use in the Malaysian setting.

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