تطبيقات على نظرية أهمية الاعتقاد في 15 مجالاً من مجالات الحياة

ناصر حسن

كونستانتينوس بيترايدس

ملخص

هدف الدراسة: في هـذه الدراسـة قمنـا بتكييـف أداة قيـاس نظريـة الاعتقاد إلى اللغـة العربيـة واختبارهـا فـي الكويـت. **المنهجيـة:** شـارك ألـف وأربعمائـة وثمانيـة وخمسـون فـردًا فـي الدراسـة، وزعوا وفقًـا لدرجاتهـم فـي أحـد أربـاع النظريـة الأربعـة: اللامبـالاة، والاكتئـاب، والغطرسـة، والتحفيـز. قمنـا بافتـراض نمـوذج جديـد لاختبـار النظريـة يشـتمل علـى 3 مجـالات عامـة للحيـاة تسـمى الوجـود والانتمـاء والصيـرورة. **النتائـج:** أشـارت النتائـج مـن التحليـل العاملـي إلـى أن نموذجنـا المقتـرح كان مقبـولاً، إلـى جانـب ان النتائـج فـي دراسـتنا، الناشـئة مـن ثلاثة مجـالات للحيـاة واسـعة النطـاق، دعمـت افتراضـات نظريـة أهميـة الاعتقـاد والنتائـج السـابقة مـع عينـات بريطانيـة. **الخلاصـة:** قدمـت هـذه الدراسـة دعمـاً قويـاً للنظريـة ككل مـن بلـد لـم يسـبق دراسـة النظريـة فيـه.

المصطلحـات الرئيسـة: نظريـة أهميـة الاعتقاد، جوانب الشـخصية الخمسـة الكبـرى، سـمة الذكاء العاطفـي مقياس TEIQue-FS.

An Application on Belief-Importance
Theory in 15 Life Domains

Nasser N. Hasan*

Konstantinos V. Petrides**

Abstract

Objective: : The present paper presents results from two studies aiming to adapt the main Belief-Importance (belimp) inventory into Arabic and test the underlying theory in Kuwait. **Methods:** One thousand four hundred and fifty-eight individuals participated in the study and were allocated according to their scores into one of the four belimp quadrants: Apathy, Depression, Hubris, and Motivation. A new model to test the belimp theory was proposed comprising 3 general life domains labelled Being, Belonging, and Becoming. **Results:** The results from the reliability and factor analyses suggested that our proposed model was acceptable. Findings in our study, emerging from three broad domain clusters, supported the belimp plane postulations and previous findings with British samples. **Conclusion:** The obtained results provide solid support to the belimp theory in a different country and culture.

Keywords: Belimp Theory, Big Five, Trait Emotional Intelligence, TEIQue-SF.

*   Assistant Professor, Department of Clinical, Educational, and Health Psychology, University College London, Educational Psychology Department, College of Education, Kuwait University. **Research interests**: Trait Emotional Intelligence, Psychometrics.
      email: nasser.hasan@ku.edu.kw

** Professor, London Psychometric Laboratory, University College London, London, United Kingdom. **Research interests**: Trait Emotional Intelligence, Psychometrics.
     email: k.petrides@ucl.ac.uk

Introduction

According to the Belief-Importance (belimp) Theory, personality traits affect the individual tendency to perceive convergences and divergences between their belief that they can achieve goals and the importance that they place on them (Petrides, 2011a, 2011b). In turn, the belimp process offers a significant improvement in the ability to predict the type of behaviour over any existing personality inventory.

The belief term is like the expectancy for success in Bandura's self-efficacy theory. In his theory, Bandura (1997) differentiated between two kinds of expectancy beliefs: outcome and efficacy expectations (Eccles & Wigfield, 2002). The former concerns the beliefs that certain types of behaviour will lead to certain task-related goals, whereas the latter concerns the beliefs about whether an individual can sufficiently perform the necessary behaviour towards the goal. The key difference between the two is that an individual can believe that a certain behaviour will lead to achieving a certain goal (outcome expectation) yet cannot believe that they can perform this action effectively (efficacy expectation). Indeed, Bandura's work is a task-specific expectation and has been applied to behaviour in many life domains (Bandura, 1997). However, belimp theory can be viewed as confidence in achieving success in multiple life domains to predict individual behaviour.

The importance term is like the task value construct proposed by Eccles et al. (1983) in their expectancy–value (EV) theory. Roughly, it reflects the attainment value that concerns the importance of doing well (Leaper, 2011). As with Bandura's work, EV theory is task-specific, concerning the motivation derived by the expectations for success and task value constructs to achieve in a particular domain. Meanwhile, belimp theory does not only concern a specific life domain but multiple life domains.

Understanding the Belimp Plane

The belimp plane (Figure 1) consists of two coordinates, one is conceptualised as belief (i.e., y-axis) and the other one as importance (i.e., x-axis). The two coordinates are orthogonal, as shown in Figure 1. However, the two coordinates will correlate in practice, given how people tend to invest in goals that they value more, which consequently increases their self-belief (Bandura, 1997).

Figure 1

The Belimp Plane. Reprinted from "An application of belief-importance theory with reference to trait emotional intelligence, mood, and somatic complaints," by K. V. Petrides (2011b). Copyright 2011 by K. V. Petrides. Reprinted with permission.
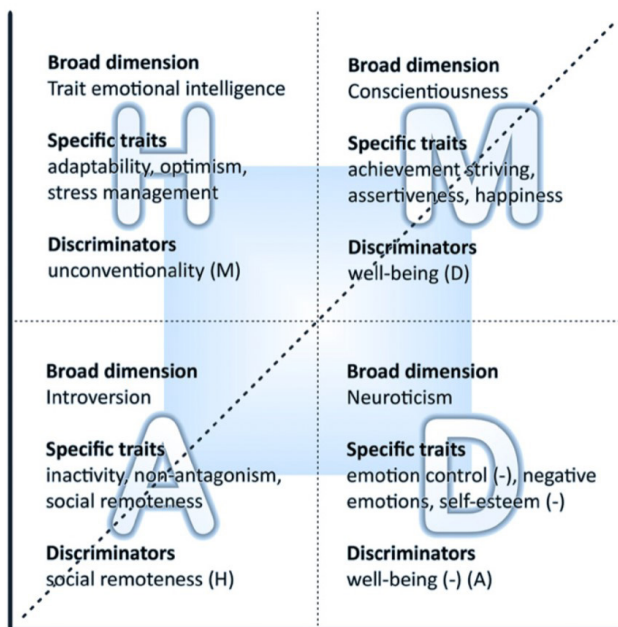
The two coordinates are affected by certain personality traits. Consequently, the individual's location on the belimp plane is determined by them. Belimp theory hypothesizes that conscientiousness and introversion personality aspects confer a tendency to move towards the symmetry axis (i.e., diagonal line). Meanwhile, the neuroticism and trait emotional intelligence aspects confer a tendency to diverge from the symmetry axis. This divergence creates residuals that can be either positive, as in the case where the belief is higher than the importance, or negative, when the importance is higher than the belief.

Four quadrants are conceptualised within the belimp plane, each of which roughly corresponds to one personality dimension and is also associated with a specific discriminator trait that helps distinguish it from their adjacent quadrants. Nonetheless, these discriminator traits cannot be treated as a key trait for their quadrant.

The top left quadrant in Figure 1, called the Hubris quadrant, corresponds to trait emotional intelligence. It suggests unconventionality, as individuals tend to believe that the major life domains are unimportant to them, even though they believe that they can succeed in them. Individuals in this quadrant tend to have a high belief that they can attain goals but place low importance on these goals.

The top right quadrant, the Motivation quadrant, corresponds to the personality trait of conscientiousness personality, which is related to conventionality and diligence. Individuals high on this trait normally tend to achieve what they view as important in most life domains. Those falling into this quadrant tend to have a high belief that they can attain goals and set high importance on these goals.

The bottom right quadrant, the Depression quadrant, corresponds to the personality trait of neuroticism. It suggests modesty as it requires for one to admit low confidence in achieving certain goals, even though such goals are important, in most of life domains. The well-being trait is a key discriminating trait for differentiating between this quadrant and the motivation quadrant above. Individuals in this quadrant tend to have low belief scores but high importance scores.

The last quadrant located in the bottom left is the Apathy quadrant which corresponds to personality trait of introversion. It suggests detachment because it entails disinterest in major life domains although this may be coupled with carelessness.

Two different types of the belimp plane can be identified: the conditional and the master belimp plane. The conditional plane can be viewed as a life-domain specific plane. Thus, there is potentially a belimp plane for every life domain. The master plane is only one, which represents the average of the conditional planes across all life domains. Accordingly, conditional planes can be either concordant or discordant with respect to the master belimp plane. For example, individuals showing high importance of beliefs (i.e., individuals in the Motivation quadrant) with respect to goals in related multiple life domains may not necessarily treat every life domain in the same manner.

The degree of concordance between the conditional and master planes is an empirical question, contingent on the individual himself. The degree of concordance between the conditional plane and other criteria can be

estimated conceptually; for instance, criteria such as the job performance construct will be more likely to be concordant with the life domain of work. These concordant planes are considered as significant predictors of behaviour, as they carry substantial information on the individual and the relevant context.

Belimp Inventory

Only one instrument has been developed to measure the belimp outcomes and to posit individual position on the belimp plane. The questionnaire was developed in English by Petrides (2011a) and coverered 15 life domains with a total of 150 questions. Specifically, for each life domain, it comprises five questions concerning the participant's belief that certain goals can be achieved by them and five matching questions concerning the importance they set on these goals. The participants are asked to answer each question by giving a percentage score ranging from 0% (absolutely unimportant) to 100% (absolutely important) for the questions concerning goal importance, and 0% (minimum confidence) to 100% (maximum confidence) for the questions concerning the belief in reaching a particular goal. To our knowledge, there have been no published adaptations of the inventory in other cultures or languages. This could explain why this theory did not receive much attention in the literature, especially in the eastern constituent of the world. Therefore, the first aim of this study is to culturally adapt the belimp inventory into Arabic for use in the Middle East, specifically in Kuwait.

Empirical Testing of Belimp Theory

Given that belimp theory is grounded on personality traits, based on its postulation, personality traits have been linked to the belimp coordinates. The first empirical study (Petrides, 2010) tested the central hypotheses of belimp theory by including a single life domain, namely, the life domain of appearance. In this study, 12 hypotheses were advanced, two of which were based on the trait emotional intelligence, and the others on the Big Five and their facets. Also, 12 one-way ANOVAs corresponding to the number of hypotheses were performed. The results suggested that all the differences among the belimp quadrants were significant. Ten hypotheses were fully supported, whereas two, on the Motivation and Apathy quadrants, were partially supported. The Motivation quadrant had the second highest score on conscientiousness, after the Hubris quadrant; the Apathy quadrant had

the second lowest score on the trait emotional intelligence questionnaire-short form sociability factor, after the Depression quadrant.

As hypothesised, participants in the Hubris quadrant scored higher compared with their counterparts in the Motivation quadrant on unconventionality; the Motivation quadrant group scored higher than the Depression quadrant group on the well-being factor of trait emotional intelligence; the Depression quadrant group scored lower than the Apathy quadrant group on the trait EI well-being; and the Apathy quadrant group scored lower than the Hubris quadrant group on sociability.

Petrides and Frederickson (2011) tested belimp theory based on another life domain (academic achievement). They performed eight one-way ANOVAs to test eight different hypotheses. Six of them were fully supported and two were partially supported. In the case of the two hypotheses, the focal group, relative to the other groups, always scored second, instead of first. Specifically, the Hubris quadrant group scored second on global trait emotional intelligence after the Motivation quadrant group, while the Apathy quadrant group scored the second lowest on the extraversion scale. Both results were expected, given the difficulty of injecting the diverse personality dimensions onto the belimp quadrants. Taking the trait emotional intelligence as an example, the optimism and stress management facets were closer to the Hubris quadrant than to the Motivation quadrant, whereas achievement striving and assertiveness were closer to the Motivation quadrant than to the Hubris one.

In a later work, Petrides (2011b) conducted two studies to test the belimp theory. The first study was limited to the single life domain of financial security, and the second one addressed this limitation by including two different life domains (attractiveness and popularity). The two studies were designed to test several hypotheses related to belimp theory through the ANOVA approach. For most of the hypotheses, the results yielded clear and consistent outcomes regardless of the included life domain. For example, the Apathy quadrant group always scored the lowest on the trait emotional intelligence for sociability, no matter what life domain was included in the analysis. Petrides (2011b) also found a strong significant association between the belimp classifications from the two different life domains included in study 2, supporting one of the belimp theory postulations. Clearly, the belimp classifications are irrespective of the life domain included and no conflicts should be expected.

A relatively more recent work by Petrides and Furnham (2015) included four different life domains to extend the previous findings. Two of the life domains had been used before (appearance and financial security), and the other two were included for the first time to test the theory (family and friends). The additional domains help illustrate that the belimp classifications are not a function of the life domain, as proposed by belimp theory. Petrides and Furnham (2015) relied on the ANOVA approach to test the theory. Five different classifications were made based on each life domain (i.e., four life domains) and a global one consisting of all four life domains through aggregation. Several hypotheses were tested per classification. The results showed that most of them were fully supported, and few were partially supported. Notably, the focal group always scored second (instead of first) in the partially supported hypotheses, as in Petrides and Frederickson (2011). Furthermore, more hypotheses were fully supported when the analysis was carried out based on the global plane. Consequently, the inclusion of more life domains, when testing belimp theory, tend to help support the main belimp theory, as expected. However, the same could also lead to different classifications for each individual, which would be based on the life domain. Furthermore, the final hypothesis in Petrides and Furnham (2015) was concerned with the overlap in classifications between the four life domains. The overlap among the domains was significant, except for that between friends and appearance. This result, along with the results from Petrides (2011b), provides evidence that the belimp classifications will overlap based on different life domains, leading to a stable classification at the individual level.

To conclude from earlier findings, It is expected that the Hubris quadrant will have the highest score on global trait EI; the Motivation quadrant will have the highest scores on Big Five conscientiousness and the Self-control factor of trait EI; The Depression quadrant will have the highest score on Big Five neuroticism and the lowest on global trait EI; and the Apathy quadrant will have the lowest score on Big Five extraversion and the Sociability factor of trait EI.

Clustering the Broad Life Domains of Belimp

For practical reasons, we believe that there is a need to categorise life domains included in the belimp inventory to a manageable number before proceeding to any statistical testing. Indeed, the number of higher-order

life domains and the justification of each domain within it are empirical issues. In a meta-analytic study, Cummins (2005) found that the number of general life domains identified by different researchers ranged from 3 to 24 domains.

Raphael et al. (1996) presented three general life domains as aspects of people's concepts, namely, Being, Becoming, and Belonging. Although the three general domains were originally proposed and widely applied to people with disabilities (Hensel, 2001; Jones et al., 2018; Livingston & Rosenbaum, 2008; Raphael et al., 1996; Raphael et al., 2001), we believe that this holistic model can be extended to be applied to people without disabilities.

More specifically, according to Raphael et al. (1996), the domain of Being refers to who the person is. It includes three sub-domains: physical being, psychological being, and spiritual being. We believe that the domains of aging, finance, health, leisure, and spirituality can be fitted within the Being domain.

The domain of Belonging relates to how well a person feels they fit within their surrounding environment. It includes three sub-domains: physical belonging, social belonging, and community belonging. We believe that appearance, family, friends, relationships, and social domains can be fitted within the Belonging domain.

The domain of Becoming refers to the person's dedicated activities toward his goals. It includes three sub-domains: practical becoming, leisure becoming, and growth becoming. We believe that the domains of habit, happiness, legacy, motivation, and success can be fitted within the Becoming domain. It is noteworthy that the leisure sub-domain of becoming represents a set of activities that lead to stress reduction. While the leisure domain in the belimp inventory concerns how much someone dedicates to leisure in his life, which represents who the person is more than what he seeks to be. This is why we proposed that the leisure domain can be fitted under the Being domain, but not the Becoming domain.

In his later review of life domains, Cummins (2005) argued that, generally, most domains selected by researchers are not theoretically justified and empirically tested. This issue is of special interest, and consequently, in this study we will apply the confirmatory factor analysis (CFA) to test our proposed model.

The Present Study

The overall aim of this study is to adapt the belimp inventory as a vehicle to test the belimp theory. The theory itself is still relatively novel and has not yet been presented to any Kuwaiti samples; it is an important theory because it can help individuals, organizations, and societies to better understand and predict human behaviour and make more informed decisions. Accordingly, we adapted the belimp inventory following the ITC (2017) guidelines.

In this study, we present the psychometric properties of the adapted belimp inventory for each belimp dimension. Also, we present evidence of the reliability and validity of scores obtained with the inventory.

Further, the results obtained shall be presented by testing the central hypotheses of belimp theory across the life domain clusters of Being, Belonging, and Becoming, respectively. Following previous work (Petrides, 2010; Petrides, 2011b; Petrides & Frederickson, 2011; Petrides & Furnham, 2015), we introduced and tested the following hypotheses:

H1: *The Hubris quadrant will have the highest score on global trait EI.*

H2: *The Motivation quadrant will have the highest score on Big Five conscientiousness.*

H3: *The Motivation quadrant will have the highest score on the Self-control factor of trait EI.*

H4: *The Depression quadrant will have the highest score on Big Five neuroticism.*

H5: *The Depression quadrant will have the lowest score on global trait EI.*

H6: *The Apathy quadrant will have the lowest score on Big Five extraversion.*

H7: *The Apathy quadrant will have the lowest score on the Sociability factor of trait EI.*

Materials and Methods

Design and Procedure

Following the ITC (2017) cultural adaptation guidelines, we consulted an expert committee to adapt the belimp inventory. The adapted

version was then piloted to a sample of 138 Kuwaiti professional adults. The pilot sample's feedback was recorded, and changes were implemented to the adapted belimp inventory accordingly. The amended version (i.e., the Kuwaiti-Arabic Belimp Inventory) was then administered to the main study sample.

We used a convenience sample design and approached participants via an anonymous Qualtrics link (online) for our main study. Several faculty members within Kuwaiti higher education institutions were contacted individually to help disseminate the Qualtrics link. Participants did not provide any personal self-identifying information, and they were only asked to identify their degree of agreement with several items. All research methods were conducted in accordance with relevant guidelines and regulations. This study was approved by the University College London-Departmental Ethics Committee (CEHP/2021/586), although we must declare that no permissions were requested to collect the data by authorities in Kuwait.

Participants

The main study sample included 1458 university students in Kuwait with a mean age of 22.34 years (SD = 7.62 years). The characteristics of our sample can be found in Table 1 below. We did not identify any missing values in our dataset, and therefore, all participants were included in our study for further analysis.

Table 1

The Characteristics of the Study Sample (N=1458)

Variable		n	%
Nationality			
	Kuwaiti	1301	9.05%
	Non-Kuwaiti	132	89.23%
	PNS	25	1.71%
Gender			
	Female	1110	76.13%
	Male	336	23.05%
	PNS	12	.82%

Cont. Table 1

The Characteristics of the Study Sample (N=1458)

Variable		n	%
Marital Status			
	Currently married	235	16.12%
	Currently unmarried	1192	81.67%
	PNS	31	2.13%
Last Degree Obtained			
	Highschool or below	1124	77.09%
	Post School Diploma	99	6.8%
	Bachelor	232	15.91%
	Masters & PhD	3	.21%
Household Income			
	Less than 500 KWD	59	4.05%
	Between 501-1000KWD	203	13.92%
	Between 1001-1500 KWD	205	20.92%
	Between 1501-2000 KWD	247	16.94%
	More than 2000 KWD	310	21.26%
	PNS	334	22.91%
Major			
	Art & Humanities	771	52.88%
	Science &Engneering	687	47.12%

Note. PNS = Prefer not to say.

Measures

Belimp Inventory

The inventory assesses 15 life domains with five questions concerning the belief that certain goals can be attained in a specific life domain and five matching questions concerning the importance of these

goals to the individual. Participants responded on a scale ranging from 0% (absolutely unimportant or minimum confidence) to 100% (absolutely important or maximum confidence).

On the life domains clusters (i.e., Being, Belonging, and Becoming) level, reliability analysis revealed that the average scores for each general life domain on both belimp dimensions were acceptably reliable: $\omega = .93$ for belief -Being ($\omega_h = .66$), $\omega = .93$ for belief-Belonging ($\omega_h = .61$), $\omega = .97$ for belief-Becoming ($\omega_h = .83$), $\omega = .89$ for importance-Being ($\omega_h = .53$), $\omega = .92$ for importance-Belonging ($\omega_h = .55$), and $\omega = .95$ for importance-Becoming ($\omega_h = .76$).

Internal consistencies for the 15 life-domains ranged from .75 to .91 on the belief dimension, and from .63 to .89 on the importance dimension. Full details can be found in Tables 2 and 3.

Table 2

Descriptive Statistics for the Life Domain Clusters on the Belief Dimension

		Overall sample (N = 1458)					
		Range[a]	M (%)	SD	Skew	Kurt	α
		[0–100]					
Being		0-100	80.0	13.8	-.63	.52	.89
	Aging	0-100	82.2	18.3	-1.24	1.97	.75
	Financial	0-100	81.3	18.4	-1.13	1.44	.82
	Health	0-100	86.6	15.8	-1.66	3.94	.81
	Leisure	0-100	76.1	22.8	-.95	.42	.86
	Spirituality	0-100	73.9	27.2	-1.04	.35	.90
Belonging		0-100	77.6	14.9	-.66	.54	.89
	Appearance	0-100	83.0	19.3	-1.25	1.25	.79
	Family	0-100	89.1	15.5	-2.43	8.01	.77
	Friends	0-100	79.7	21.0	-1.27	1.64	.82
	Relationships	0-100	72.9	26.2	-1.04	.48	.81
	Social	0-100	63.4	27.0	-.42	-.64	.82

Cont. Table 2

Descriptive Statistics for the Life Domain Clusters on the Belief Dimension

		Overall sample (N = 1458)					
		Range[a]	M (%)	SD	Skew	Kurt	α
Becoming		0-100	85.9	15.1	-1.46	2.77	.95
	Habit	0-100	86.2	18.7	-1.79	3.72	.88
	Happiness	0-100	86.9	17.2	-1.92	4.79	.83
	Legacy	0-100	78.8	24.5	-1.21	.88	.83
	Motivation	0-100	88.0	16.9	-2.07	5.77	.89
	Success	0-100	89.4	16.2	-2.10	5.59	.91

[a] **The theoretical ranges are between the square brackets.**

Table 3

Descriptive Statistics for the Life Domain Clusters on the Importance Dimension

		Overall sample (N = 1458)					
		Range[a]	M (%)	SD	Skew	Kurt	α
		[0–100]					
Being		38.7 -100	85.9	10.8	-.85	.68	.84
	Aging	0-100	87.4	15.2	-1.68	4.07	.63
	Financial	0-100	89.9	14.2	-2.19	6.81	.74
	Health	0-100	89.8	12.9	-1.55	2.91	.71
	Leisure	1.6-100	83.9	17.0	-1.17	1.17	.72
	Spirituality	0-100	78.7	26.1	-1.38	1.22	.89
Belonging		19.6-100	75.5	14.8	-.42	.04	.87
	Appearance	0-100	77.5	21.8	-.77	-.39	.78
	Family	0-100	90.8	13.7	-2.73	10.75	.73
	Friends	0-100	81.2	20.7	-1.37	1.83	.81

Cont. Table 3

Descriptive Statistics for the Life Domain Clusters on the Importance Dimension

	Overall sample (N = 1458)					
	Range[a]	M (%)	SD	Skew	Kurt	α
Relationships	0-100	74.4	25.0	-1.16	.88	.77
Social	0-100	53.6	28.6	.02	-.92	.83
Becoming	8-100	91.5	10.7	-2.34	8.28	.92
Habit	0-100	93.3	13.2	-3.37	15.03	.83
Happiness	0-100	92.3	11.6	-2.76	11.96	.67
Legacy	0-100	85.7	20.7	-1.96	4.06	.67
Motivation	0-100	92.8	12.7	-2.98	12.77	.85
Success	0-100	93.2	13.6	-3.23	13.39	.87

[a] **The theoretical ranges are between the square brackets.**

Kuwaiti Arabic TEIQue-SF

The TEIQue-SF is a 30-item inventory providing comprehensive coverage of the sampling domain of trait EI in adults (Petrides, 2009). The items are responded on a 7-point Likert scale. All TEIQue instruments are available, free of charge, for research purposes from www.psychometriclab.com. In this study, we used the Kuwaiti-Arabic adaptation of TEIQue-SF (Hasan et al., 2023), which has shown robust psychometric properties in Kuwaiti samples.

The global trait EI had satisfactory reliability (α = .83, = .86). The corresponding, value .37, meaning that 37% of the data's variance was accounted for the general factor (global trait EI). At the factor level of trait EI, Cronbach's alpha values ranged from .43 to .71.

Kuwaiti Arabic NEO-FFI

The NEO-FFI is the short form of the NEO-PI developed by McCrae and Costa (2008). The inventory comprises 60 items providing scores on the Big Five factors: Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A), and Conscientiousness (C). One limitation is that it does not yield scores at the facet level as the NEO-PI. However, we used

it in our study due to circumstances relating to our project (esp., limited time). We used Alansari's (1997) Kuwaiti-Arabic adaptation.

Cronbach's alpha values were .77, .66, .31, .50, and .81, for the factors of Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness, respectively.

Data Analysis Plan

We performed a descriptive analysis for each life domain among the two belimp coordinates. Also, we computed Cronbach's alpha to assess the internal consistency of the results obtained by the adapted belimp inventory. The analyses were carried out through IBM SPSS Statistics for Macintosh, version 27.0 (IBM Corp., 2020).

We conducted CFA with ML estimator and modification indices (M.I.) to validate the proposed clustered life domain model discussed earlier. CFA was performed using the Lavaan package (Rosseel, 2012) in R. Model fit statistics will be obtained to evaluate the model goodness according to Hair et al. (2010).

Subsequently, scores of 15-specific life domains were averaged to compute scores for our three proposed general life domains of Being, Belonging, and Becoming on both dimensions of belimp (i.e., 6 average scores: 3 on the belief dimension and 3 on the importance dimension).

We calculated Cronbach's alphas (Cronbach, 1951) for each of the 30 belimp subscales (i.e., the belief and importance dimensions for the 15-life domains). The indices were computed using the ltm package (Rizopoulos, 2006) in R 4.0.5 (Rstudio Team, 2021). We also used the psych package (Revelle, 2021) to compute McDonald's omega ω (McDonald, 2013) for assessing and interpreting the internal consistency of our proposed multidimensional model comprising belief and importance ratings on Being, Becoming, and Belonging. The corresponding omega hierarchical (ω_h) was also computed to know the proportion of scale variance that is due to the general factor (i.e., general life domain).

Further, four groups (viz., Apathy, Depression, Hubris, and Motivation) were derived by combining high and low scores on both dimensions of belimp using mean splits like those of Petrides (2011b). Skewness values ranged between -2.35 and -.42, and kurtosis values ranged between .05 and 2.79 except for 8.33 on the importance dimension of the Becoming domain

cluster. All hypotheses were tested through the Analysis of Variance (ANOVA) approach, followed by Tukey post hoc tests.

Results

Descriptive statistics for each life domain on the belief and importance dimensions are depicted in Tables 2 and 3. As can be observed in both tables, there is slight negative skewness in almost all belief ratings. However, on the importance dimension, the skewness values for the life domains of habit and success fall outside of the acceptable ranges. Ditto, the kurtosis values for the life domains of family, motivation, habit, success, and happiness.

### What is the Factorial Structure of Belimp Inventory?

We tested our proposed model for each dimension of belimp by conducting a CFA using ML estimator, where three first-order latent constructs (viz., Being, Belonging, and Becoming) were pooled in one measurement model. To improve the measurement model, modification indices (M.I.) were applied to identify the correlated items and correspondingly amend the proposed model to improve it.

Before applying M.I. for the belief dimension, we assessed the model without M.I. and the fit indices were as follows: $\chi^2 = 607.92$ (df = 83, p < .001), CFI = .93, RMSEA = .06 [90% CI: .06 - .07], and SRMR = .04.

As we did for the belief dimension, we ran the CFA analysis before applying M.I. for the importance dimension and the fit indices are as follows: $\chi^2 = 782.46$ (df = 83, p < .001), CFI = .88, RMSEA = .07 [90% CI: .07 - .08], and SRMR = .06.

Modification indices suggested the existence of correlated errors. However, we took into consideration both statistical and, more importantly, theoretical rationale to include the suggested correlated errors based on Hair's et al. (2010) recommendations. Thus, four more correlated errors were added to the CFA model for both dimensions of belimp: between family and friends, between appearance and habits, between appearance and motivation, and between habits and motivation.

The final pooled-CFA model with M.I. for the belief dimension is presented in Figure 2. Model fit indices for the proposed model improved as follows: $\chi^2 = 526.14$ (df = 83, p < .001), CFI = .94, RMSEA = .061 [90% CI: .056 - .066], and SRMR = .042.

Figure 2

CFA Model with Correlated Errors Corresponding to the Two Belimp Dimensions

1. Belief dimension
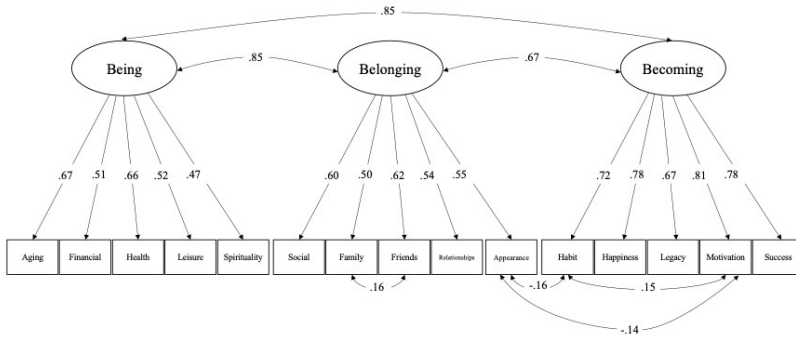
2. Importance dimension
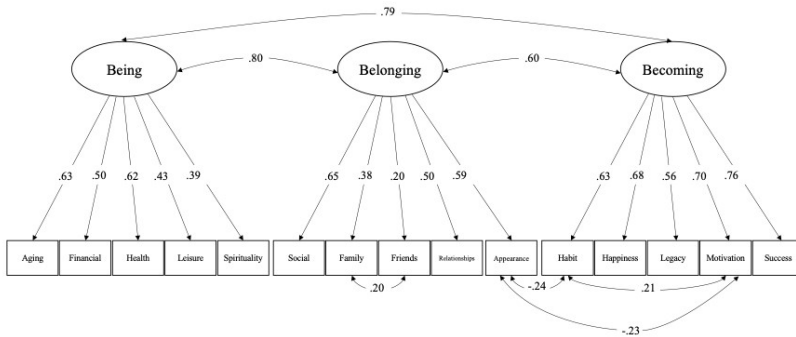
The final pooled-CFA model with M.I. for the importance dimension is presented in Figure 2. Model fit indices for the proposed model improved as the following: $\chi^2 = 603.17$ (df = 83, p < .001), CFI = .91, RMSEA = .066 [90% CI: .061 - .071], and SRMR = .053.

A good model as argued by Hair et al. (2010) would be expected to have a significant χ^2 value, CFI > .92, SRMR < .08, and RMSEA < .07, based on the characteristics of our study (sample size larger than 250 and 15 observed variables). Thus, our result, in general, falls within the expected good model fit values as indicated above. Taking all together, we believe that both CFA models are acceptable.

What is the Role of Different Life Domain Clusters in Testing Belimp Theory?

The one-way ANOVA results for each life domain cluster will be presented in the following lines.

Domain Cluster of Being

Seven one-way ANOVAs were performed to test the study hypotheses with reference to the domain cluster of Being. Table 4 presents the details for these comparisons.

Table 4

Descriptive Statistics and One-way ANOVA results for the domain cluster of Being

Variable	Hubris (H) n=120	Motivation (M) n=515	Depression (D) n=178	Apathy (A) n=409	F	Tukey post-hoc test	Hypothesis supported?
Global trait EI	4.71 (.72)	4.73 (.79)	4.57 (.81)	4.55 (.74)	5.31**	h > a, d; a < d	Partially (H1); Partially (H5)
Emotionality	4.56 (.86)	4.58 (.91)	4.49 (.95)	4.47 (.83)	1.28		
Self-control	4.28 (.89)	4.37 (1.04)	4.12 (1.04)	4.16 (.96)	6.35***	m > a**, d, h**	Yes (H3)
Sociability	4.66 (.95)	4.77 (1.01)	4.53 (1.11)	4.56 (1.01)	5.35**	a < h, m**	Partially (H7)
Well-being	5.50 (1.05)	5.38 (1.16)	5.27 (1.07)	5.21 (1.12)	4.94**		
Agreeableness	40.01 (6.01)	40.36 (5.72)	40.06 (4.70)	39.37 (5.07)	3.55*		
Conscientiousness	43.02 (5.25)	43.49 (5.39)	42.18 (4.43)	41.61 (4.90)	12.60***	m > a***, d*, h	Yes (H2)
Extraversion	40.73 (5.80)	41.10 (5.57)	40.01 (3.95)	39.29 (4.50)	13.32***	a < d, h*, m***	Yes (H6)

Cont. Table 4

Descriptive Statistics and One-way ANOVA results for the domain cluster of Being

Variable	Hubris (H) n=120	Motivation (M) n=515	Depression (D) n=178	Apathy (A) n=409	F	Tukey post-hoc test	Hypothesis supported?
Neuroticism	34.66 (6.31)	33.70 (6.69)	34.45 (4.99)	33.67 (5.38)	1.41	d > a, m	Partially (H4)
Openness	40.30 (5.52)	41.07 (5.47)	40.22 (4.31)	39.42 (5.06)	12.03***		

Note. Means and (standard deviations); * p< .05; ** p< .01; *** p< .001; Degrees of freedom for all ANOVAs were 3 for the numerator and ranged between 1218 and 1454 for the denominator, depending on the missing data; EI = emotional intelligence.

Out of the seven hypotheses considering the domain cluster of Being, three were fully supported by the data, and four partially. Specifically, the Hubris quadrant had the second highest score on global trait EI, thus providing partial support for H1. The Motivation quadrant had the highest score on conscientiousness and the self-control factor of trait EI, thus supporting H2 and H3. The Depression quadrant had the second highest score on neuroticism and second lowest score on global trait EI, thus providing partial support for H4 and H5. The Apathy quadrant had the lowest score on extraversion and second lowest score on the sociability factor, thus providing full support for H6 and partial support for H7. Several post-hoc comparisons between the four quadrants reached statistical significance levels as shown in Table 4.

Domain Cluster of Belonging

Seven one-way ANOVAs were performed to test the study hypotheses with reference to the domain cluster of Belonging. Table 5 presents the details for these comparisons.

Table 5

Descriptive Statistics and One-way ANOVA results for the domain cluster of Belonging

Variable	Hubris (H) n=117	Motivation (M) n=550	Depression (D) n=100	Apathy (A) n=455	F	Tukey post-hoc test	Hypothesis supported?
Global trait EI	4.80 (.73)	4.70 (.79)	4.53 (.75)	4.57 (.75)	4.47**	h > a*, d, m; d < a, m	Yes (H1); Yes (H5)
Emotionality	4.77 (.83)	4.57 (.92)	4.44 (.86)	4.43 (.85)	5.15**		
Self-control	4.28 (1.11)	4.28 (1.00)	4.02 (.92)	4.26 (1.00)	3.18*	m > a, d*; m = h	Yes (H3)
Sociability	4.94 (.93)	4.73 (.99)	4.45 (1.09)	4.53 (1.05)	9.80***	a < h***, m**	Partially (H7)
Well-being	5.47 (1.00)	5.33 (1.15)	5.32 (1.09)	5.27 (1.14)	1.66		
Agreeableness	40.44 (4.53)	40.41 (5.68)	40.00 (5.20)	39.26 (5.27)	5.01**		
Conscientiousness	42.79 (4.49)	43.21 (5.40)	41.95 (4.83)	42.02 (4.99)	5.12**	m > a***, d, h	Yes (H2)
Extraversion	38.51 (4.29)	41.48 (5.45)	40.90 (4.77)	39.19 (4.53)	28.36***	a < d**, m***	Partially (H6)
Neuroticism	32.38 (4.55)	34.07 (6.70)	34.89 (6.23)	33.86 (5.31)	2.94*	d > a, h*, m	Yes (H4)
Openness	39.90 (3.97)	41.07 (5.41)	39.81 (5.88)	39.63 (5.03)	9.04***		

Note. Means and (standard deviations); *p< .05; **p< .01; ***p< .001; Degrees of freedom for all ANOVAs were 3 for the numerator and ranged between 1218 and 1454 for the denominator, depending on the missing data; EI = emotional intelligence.

Out of the seven hypotheses considering the domain cluster of Belonging, five were fully supported by the data, and two partially

supported. Specifically, the Hubris quadrant had the highest score on global trait EI, thus providing support for H1. The Motivation quadrant had the highest score on conscientiousness and the self-control factor of trait EI, thus supporting H2 and H3. The Depression quadrant had the highest score on neuroticism and lowest score on global trait EI, thus providing support for H4 and H5. The Apathy quadrant had the second lowest score on extraversion and second lowest score on the sociability factor, thus providing partial support for H6 and H7. Most post-hoc comparisons between the four quadrants reached statistical significance levels as shown in Table 5.

Domain Cluster of Becoming

Seven one-way ANOVAs were performed to test the study hypotheses with reference to the domain cluster of Becoming. Table 6 presents the details for these comparisons.

Table 6

Descriptive Statistics and One-way ANOVA results for the domain cluster of Becoming

Variable	Hubris (H) n=92	Motivation (M) n=633	Depression (D) n=142	Apathy (A) n=355	F	Tukey post-hoc test	Hypothesis supported?
Global trait EI	4.74 (.74)	4.76 (.79)	4.65 (.73)	4.41 (.72)	16.90^{***}	h > a, d^{**}; d > a^{**}	Partially (H1); Partially (H5)
Emotionality	4.62 (.84)	4.59 (.90)	4.58 (.87)	4.38 (.85)	4.67^{**}		
Self-control	4.40 (.98)	4.39 (1.03)	4.13 (1.04)	4.02 (.90)	11.40^{***}	m > a^{***}, d^{*}	Partially (H3)
Sociability	4.62 (.86)	4.81 (1.01)	4.60 (1.04)	4.40 (1.03)	12.93^{***}	a < d, h, m^{***}	Yes (H7)
Well-being	5.50 (1.14)	5.44 (1.16)	5.40 (.97)	5.03 (1.07)	12.90^{***}		

Cont. Table 6

Descriptive Statistics and One-way ANOVA results for the domain cluster of Becoming

Variable	Hubris (H) n=92	Motivation (M) n=633	Depression (D) n=142	Apathy (A) n=355	F	Tukey post-hoc test	Hypothesis supported?
Agreeableness	39.16 (5.42)	40.24 (5.77)	39.91 (4.68)	39.65 (4.99)	1.91		
Conscientiousness	42.71 (5.35)	43.54 (5.33)	42.37 (3.87)	41.07 (4.83)	22.22***	m > a***, d, h	Yes (H2)
Extraversion	39.03 (4.40)	41.27 (5.52)	39.99 (4.11)	39.02 (4.44)	22.34***	a < d*, h, m***	Yes (H6)
Neuroticism	33.36 (5.55)	33.74 (6.73)	33.78 (4.64)	34.36 (5.18)	1.68	d > h, m	Partially (H4)
Openness	40.21 (4.75)	41.22 (5.56)	40.26 (4.45)	38.77 (4.64)	22.91***		

Note. Means and (standard deviations); *p< .05; **p< .01; ***p< .001; Degrees of freedom for all ANOVAs were 3 for the numerator and ranged between 1218 and 1454 for the denominator, depending on the missing data; EI = emotional intelligence.

Out of the seven hypotheses considering the domain cluster of Becoming, three were fully supported by the data, and four partially supported. Specifically, the Hubris quadrant had the second highest score on global trait EI, thus providing partial support for H1. The Motivation quadrant had the highest score on conscientiousness and second highest score on the self-control factor of trait EI, thus supporting H2 and partially supporting H3. The Depression quadrant had the second highest score on neuroticism and second lowest score on global trait EI, thus providing partial support for H4 and H5. The Apathy quadrant had the lowest score on extraversion and the sociability factor of trait EI, thus providing support for H6 and H7. Most post-hoc comparisons between the four quadrants reached statistical significance levels as shown in Table 6.

Discussion

The present study feeds into the existing literature of belimp theory in three unique ways. Firstly, it is the first to include a non-British sample, as in previously published studies (Petrides, 2010, 2011b; Petrides & Frederickson, 2011; Petrides & Furnham, 2015). Second, it is the first attempt to perform CFA on belimp data with 15 life domains. Third, it is the first attempt to test belimp theory with the broad domain clusters of Being, Belonging, and Becoming.

Psychometric Properties of the Belimp Inventory

Life Domain Clusters

We proposed a general life domain model to study the belimp theory after reviewing the relevant literature (e.g., Cummins, 2005; King et al., 2000; Raphael et al., 1996; Raphael et al., 2001). This is because having many life domains in one study (e.g., 15 in our study) is not practical for performing complex analyses, such as structural equation modelling, required digging deeper into the belimp theory. For example, if we treated each life domain separately in this paper, it would result in testing 105 hypotheses in total. Another reason is related to the findings in Petrides and Furnham (2015), in which more hypotheses were fully supported when a global classification was derived from four life domains: Appearance, Family, Finance, and Friends. Thus, we believe that deriving general clusters based on multiple life domains will help us to: 1) perform complex analyses with belimp data such as CFA; and 2) test central belimp theory tenets with fewer hypotheses.

Consequently, we came up with three broad domain clusters comprising five life domains each. This resultant model is roughly aligned with Raphael et al.'s (1996) classifications. For example, the domain cluster of Being included the specific life domains of aging, finance, health, leisure, and spirituality in our model, which correspond to Raphael's et al. (1996) physical being, psychological being, and spiritual being.

CFA for our Proposed Model

We started our model assessment for both dimensions of belimp by running CFA accounting for M.I. not only to improve our proposed model theoretically but also to improve the fit values statistically. Theoretically,

we only retained correlated errors suggested by M.I. if an appropriate literature supports it for both dimensions of belimp. Thus, we added to the first correlated error between family and friends since previous studies highlighted the role of family and friends jointly on one's life (Buck & Smith, 2014; Yubero et al., 2018). The second correlated error was between appearance and habits. This is because several studies found that there is a relationship between one's appearance and different types of habits, such as eating habits (Heiman & Olenik-Shemesh, 2019) and exercise habits (Littrell, 2017). The third correlated error was between appearance and motivation, as some research found that appearance and motives are negatively related (Mroz et al., 2018). The last correlated error was between habits and motivation which was based on the findings of some studies (e.g., Gardner & Lally, 2012; Hopkins et al., 2022), where it was suggested that motivation increased the likelihood of activity becoming habitual.

Subsequently, fit indices results showed that the two models of both dimensions of belimp improved after adding the correlated errors mentioned earlier. In fact, the pooled CFA after accounting for M.I. for the Belief dimension met Hair et al.'s (2010) expectations for such research characteristics. The results were not markedly different for the Importance dimension except that the CFI value of .91 was .01 below Hair et al.'s (2010) expected value of .92. However, it can still be argued that the two models were acceptable, given the fact that this is the first attempt to apply CFA on belimp data. Nonetheless, we encourage researchers to consider testing the model with different samples and in different countries in their future studies.

The Internal Consistency of Belimp Scores

We attempted to assess the psychometric properties of the inventory with a reference to each of the 15 life domains, as well as our domain clusters of Being, Belonging, and Becoming.

After examining the factorial structure of our proposed model, we assessed the internal consistency of the belimp scores for each life domain on both dimensions of belimp. Alphas for the 15 life domains were computed and were generally acceptable as shown in the results.

McDonald's omega was computed to assess the internal consistency of belimp scores obtained from the three clustered domains (e.g., Being,

Belonging, and Becoming). This was because the method of computing alpha values tended to either underestimate (Cronbach, 1951; Schmitt, 1996) or overestimate (Reise et al., 2013) the reliability of scores obtained by multidimensional measures. Revelle and Zinbarg (2008) showed that omega was more accurate than other reliability indices (e.g., Cronbach's alpha) in estimating the reliability of scores obtained from multidimensional measures.

Accordingly, the results in our study showed that the reliability estimates based on omega values for the three clustered life domains on both dimensions of belimp were highly acceptable. In fact, hierarchical omega values showed that the proportion of scale variance that accounted for each cluster on both dimensions were high. For the Belief dimension, the proportions of 66%, 61%, and 83%, of the scale variance were accounted for in the cluster domains of Being, Belonging, and Becoming, respectively; while for the Importance dimension, the proportions were 53%, 55%, and 76%, for Being, Belonging, and Becoming, respectively.

Testing Belimp Theory

We aimed to test belimp theory with reference to major personality traits (e.g., Big Five and trait EI). To this end, we advanced a series of hypotheses that we could not practically test with a large number of life domains for several reasons. For example, performing ANOVAs with 15 life domains as the dependent variables would result in testing 105 hypotheses (7 per life domain). This can lead not only to testing a large number of hypotheses but also to presenting inconsistent and inaccurate results.

In fact, belimp theory suggests that the individual's position on conditional belimp planes (i.e., based on different life domains) can be different from their position on the master belimp plane (i.e., the global classification derived from pulling data from multiple life domains). Petrides and Furnham (2015) found that the relationship between the four quadrants and their corresponding personality traits was strengthened when the data was pulled from several different domains into a global one.

Of the 21 hypotheses based on the three domain clusters, 11 were fully supported and 10 partially supported by our data. Overall, our results were in line with belimp theory, which posits higher confirmation rates for data that are pooled over multiple domains as was also observed in Petrides and Furnham (2015).

As in Petrides and Furnham (2015), our results showed that 4 out of the 10 partially supported hypotheses were related to global trait EI. This is not surprising since global trait EI is a very general personality trait and empirical studies (e.g., 40) found that personality facets perform better than general personality constructs in predicting behaviour (which is compatible with the tenets of the belimp process). As a specific example within belimp theory, Petrides and Furnham (2015) argued that the Hubris quadrant would be more closely related to the narrow construct of narcissism than to broad construct of global trait EI. Several studies within the organisational settings suggested that the personality trait of Narcissism is a key characteristic in Hubristic people (Hiller & Hambrick, 2005; Tracy & Robins, 2007). In fact, Picone et al. (2014) argued that Narcissism can be viewed as a contributory factor in the development of Hubristic personality. Even more, Hubris syndrome shares many features with narcissistic personality disorder as shown in several studies (Asad & Sadler-Smith, 2020; Owen & Davidson, 2009). Therefore, it seems that a construct other than trait EI and rather narrower in scope may provide a better conceptual and empirical fit for the first quadrant of the belimp plane.

Although this study may be considered relatively unique in its testing of the belimp theory, yet it has shown some limitations; first, the study sample only comprised Kuwaiti students, who are relatively homogeneous in terms of their backgrounds and experiences in life. We encourage future researchers to test belimp theory with samples other than students. Second, this study was done in Kuwait, which limited our understanding of the belimp theory across different region of the world. This is because belimp theory is affected by personality traits which are perceived differently across different cultures and countries. Lastly, as shown in our study, it is not easy to distinguish between Hubris and Motivation quadrants using self-report measures. Therefore, performance-based outcomes should be considered in distinguishing the two quadrants as Petrides and Frederickson (2011). We encourage future researchers to test belimp theory with non-self-report measures.

Belimp Theory in Kuwait

To our knowledge, this study is the first to apply the belimp theory to an Arabic sample, and specifically, Kuwaiti. It is important to introduce this theory to the field of Psychology in Kuwait because it would provide

us with significant efficacy in predicting behaviour more than any other personality inventories. Therefore, behaviour modification strategies could be used with individuals to manipulate to either increase desirable behaviours or decrease undesirable ones.

Conclusions and Recommendations

Although our study was not exempt from limitations, the findings that emerged from three broad domain clusters, supported the belimp plane postulations and previous findings with British samples: a) trait EI is the key trait underlying the Hubris quadrant (Petrides, 2010, and two life domains out of three in 2011b; the Global life domain in Petrides and Furnham, 2015), b) Conscientiousness is the key trait underlying the Motivation quadrant (the Global life domain in Petrides & Furnham, 2015), c) Introversion is the key trait underlying the Apathy quadrant (Petrides, 2010), and d) Neuroticism is the key trait underlying the Depression quadrant (Petrides, 2010; Petrides & Furnham, 2015). Taken altogether, our findings offer further support to the belimp theory in another country (not like previous studies focusing on UK samples only) with a different cultural background. This is, however, a call for international researchers to expand the belimp theory literature in different countries and cultures.

We believe that this theory is important to policymakers and in different practices because it offers significant utility and incremental validity in predicting an individual's behaviour over standard personality inventories (Petrides, 2011a). It also allows them to understand the public beliefs and attitudes toward a certain life domain so that they can tailor their policies to address the needs and concerns of the individuals. Policymakers can apply behaviour modification strategies to benefit their constituents, for example, by influencing the latter's standing on one or both belimp coordinates. According to the theory, if policymakers can help magnify the belief and importance of education in the individual, they could enhance their motivation and eventually their overall attainment. For example, policymakers can leverage the belimp theory to change the attitudes of students, teachers, and parents toward cheating in education through emphasising the negative consequences of cheating and encouraging them to develop a sense of personal responsibility for their own actions. This could be done by launching a public awareness campaign that focuses on the consequences of cheating and the importance of academic integrity.
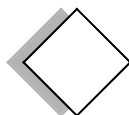
References

Alansari, B. M. (1997). The Psychometric Properties of NEO-FFI-S Based on the Kuwaiti Society. *Educational Journal, 12* (42), 11-41. Retrieved from https://search.mandumah.com/Record/755320

Asad, S., & Sadler-Smith, E. (2020). Differentiating leader hubris and narcissism on the basis of power. *Leadership*, *16* (1), 39–61. https://doi.org/10.1177/1742715019885763

Bandura, A. (1997). *Self-efficacy: The exercise of control.* W H Freeman/Times Books/Henry Holt & Co.

Buck, A., & Smith, M. (2014). The Importance of family and friends in advice-seeking for rights problems. *Social Policy & Society*, *14* (2), 175–188. https://doi.org/10.1017/s1474746414000141

Costa, P. T., Jr., & McCrae, R. R. (2008). The Revised NEO Personality Inventory (NEO-PI-R). In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *The SAGE handbook of personality theory and assessment, Vol. 2. Personality measurement and testing* (pp. 179–198). Sage Publications, Inc. https://doi.org/10.4135/9781849200479.n9

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3), 297–334.https://doi.org/10.1007/bf02310555

Cummins, R. A. (1996). The domains of life satisfaction: An attempt to order chaos. *Social Indicators Research*, *38* (3), 303–328. https://doi.org/10.1007/bf00292050

Cummins, R. A. (2005). Moving from the quality of life concept to a theory. *Journal of Intellectual Disability Research*, *49* (10), 699–706. https://doi.org/10.1111/j.1365-2788.2005.00738.x

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology, 53* (1), 109–132. https://doi.org/10.1146/annurev.psych.53.100901.135153

Eccles, J. S. [Parsons], J., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., & Midgley, C. (1983). Expectations, values and academic behaviors. In J. T. Spence (Ed.), *Perspective on achievement and achievement motivation* (pp. 75–146). San Francisco: W. H. Freeman.

Gardner, B., & Lally, P. (2012). Does intrinsic motivation strengthen physical activity habit? Modeling relationships between self-determination, past behaviour, and habit strength. *Journal of Behavioral Medicine*, *36* (5), 488–497. https://doi.org/10.1007/s10865-012-9442-0

Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: a global perspective*. Pearson Education, Cop.

Hasan, N. N., Petrides, K. V., Hull, L., & Hadi, F. (2023). Trait emotional intelligence profiles of professionals in Kuwait. *Frontiers in Psychology*, 14. https://doi. org/10.3389/fpsyg.2023.1051558

Heiman, T., & Olenik-Shemesh, D. (2019). Perceived body appearance and eating habits: The voice of young and adult students attending higher education. *International Journal of Environmental Research & Public Health*, *16* (3), 451. https://doi. org/10.3390/ijerph16030451

Hensel, E. (2001). Is Satisfaction a Valid Concept in the Assessment of Quality of Life of People with Intellectual Disabilities? A Review of the Literature. *Journal of Applied Research in Intellectual Disabilities*, *14* (4), 311–326. https://doi. org/10.1046/j.1468-3148.2001.00081.x

Hiller, N. J., & Hambrick, D. C. (2005). Conceptualizing executive hubris: the role of (hyper-)core self-evaluations in strategic decision-making. *Strategic Management Journal*, *26* (4), 297–319. https://doi.org/10.1002/smj.455

Hopkins, N., Benstead, J., Wardle, M., & Divine, A. (2022). Associations between Motivation, Attitudes, and Habit Strength in Physical Activity Behaviour. *Journal of Physical Activity Research*, *7* (2), 74–80. https://doi.org/10.12691/jpar-7-2-1

International Test Commission. (2017). *The ITC Guidelines for Translating and Adapting Tests (Second edition)*. [www.InTestCom.org]

Jones, N., Bartlett, H. E., & Cooke, R. (2018). An analysis of the impact of visual impairment on activities of daily living and vision-related quality of life in a visually impaired adult population. *British Journal of Visual Impairment*, *37* (1), 50–63. https://doi.org/10.1177/0264619618814071

King, G. A., Cathers, T., Polgar, J. M., MacKinnon, E., & Havens, L. (2000). Success in Life for Older Adolescents with Cerebral Palsy. *Qualitative Health Research*, *10* (6), 734–749. https://doi.org/10.1177/104973200129118796

Leaper, C. (2011). More similarities than differences in contemporary theories of social development: A plea for theory bridging. In J. B. Benson (Ed.), *Advances in child development and behavior,* Vol. 40, pp. 337–378). Elsevier Academic Press. https://doi.org/10.1016/B978-0-12-386491-8.00009-8

Littrell, A. (2017). *The relationship between body image and exercise type* (p. 366) [Undergraduate Honors Theses].

Livingston, M. H., & Rosenbaum, P. L. (2008). Adolescents with cerebral palsy: stability in measurement of quality of life and health-related quality of life over 1 year. *Developmental Medicine & Child Neurology*, *50* (9), 696–701. https:// doi.org/10.1111/j.1469-8749.2008.03053.x

McDonald, R. P. (2013). *Test Theory*. Psychology Press. https://doi.org/10.4324/9781410601087

Mroz, J. E., Pullen, C. H., & Hageman, P. A. (2018). Health and appearance reasons for weight loss as predictors of long-term weight change. *Health Psychology Open*, *5* (2), 205510291881660. https://doi.org/10.1177/2055102918816606

Owen, D., & Davidson, J. (2009). Hubris syndrome: An acquired personality disorder? A study of US Presidents and UK Prime Ministers over the last 100 years. *Brain*, *132* (5), 1396–1406. https://doi.org/10.1093/brain/awp008

Paunonen, S. V., & Ashton, M. C. (2001). Big Five factors and facets and the prediction of behavior. *Journal of Personality and Social Psychology*, *81* (3), 524–539. https://doi.org/10.1037/0022-3514.81.3.524

Petrides, K. V. (2010). An Application of Belief-Importance Theory with Reference to the Big Five and Trait Emotional Intelligence. *Social Behavior and Personality: An International Journal*, *38* (5), 697–709. https://doi.org/10.2224/sbp.2010.38.5.697

Petrides, K. V. (2011a). A general mechanism for linking personality traits to affect, motivation, and action. *New Ideas in Psychology*, *29* (2), 64–71. https://doi.org/10.1016/j.newideapsych.2010.02.001

Petrides, K. V. (2011b). An application of belief-importance theory with reference to trait emotional intelligence, mood, and somatic complaints. *Scandinavian Journal of Psychology*, *52* (2), 161–167. https://doi.org/10.1111/j.1467-9450.2010.00832.x

Petrides, K. V., & Frederickson, N. (2011). An application of belief-importance theory in the domain of academic achievement. *British Journal of Educational Psychology*, *81* (1), 97–111. https://doi.org/10.1111/j.2044-8279.2010.02010.x

Petrides, K. V., & Furnham, A. (2015). Further Tests of Belief-Importance Theory. *PLOS ONE*, *10* (4), e0121978. https://doi.org/10.1371/journal.pone.0121978

Picone, P. M., Dagnino, G. B., & Minà, A. (2014). The origin of failure: A multidisciplinary appraisal of the hubris hypothesis and proposed research agenda. *Academy of Management Perspectives*, *28* (4), 447–468. https://doi.org/10.5465/amp.2012.0177

Raphael, D., Brown, I., Renwick, R., & Rootman, I. (1996). Assessing the quality of life of persons with developmental disabilities: Description of a new model, measuring instruments, and initial findings. *International Journal of Disability, Development & Education*, *43* (1), 25–42. https://doi.org/10.1080/0156655960430103

Raphael, D., Waalen, J., & Karabanow, A. (2001). Factor Analytic Properties of the quality of life profile: Examination of the nine subdomain quality of life model. *Psychological Reports*, *88*(1), 265–276. https://doi.org/10.2466/pr0.2001.88.1.265

Reise, S. P., Moore, T. M., & Haviland, M. G. (2013). Applying unidimensional item response theory models to psychological data. *APA Handbook of Testing and Assessment in Psychology, Vol. 1: Test Theory and testing and assessment in industrial and organizational psychology.*, 101–119. https://doi.org/10.1037/14047-006

Revelle, W. (2021). *psych: Procedures for Psychological, Psychometric, and Personality Research*. Northwestern University, Evanston, Illinois. R package version 2.2.5, https://CRAN.R-project.org/package=psych.

Revelle, W., & Zinbarg, R. E. (2008). Coefficients Alpha, Beta, Omega, and the glb: Comments on Sijtsma. *Psychometrika*, *74* (1), 145–154. https://doi.org/10.1007/s11336-008-9102-z

Rizopoulos, D. (2006). ltm: An R Package for latent variable modeling and item response theory analyses. *Journal of Statistical Software*, *17* (5). https://doi.org/10.18637/jss.v017.i05

Rosseel, Y. (2012). lavaan: An R Package for structural equation modeling. *Journal of Statistical Software*, *48* (2). https://doi.org/10.18637/jss.v048.i02

RStudio Team (2021). RStudio: Integrated development for R. RStudio, Inc., Boston, MA URL http://www.rstudio.com/.

Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological Assessment, 8* (4), 350–353. https://doi.org/10.1037/1040-3590.8.4.350

Tracy, J. L., & Robins, R. W. (2007). The psychological structure of pride: A tale of two facets. *Journal of Personality & Social Psychology*, *92* (3), 506–525. https://doi.org/10.1037/0022-3514.92.3.506

Yubero, S., Navarro, R., Larrañaga, E., Esteban, M., Gutiérrez, J., & Elche, M. (2018). Health Contributing Factors in Higher Education Students: The Importance of Family and Friends. *Healthcare*, *6* (4), 147. https://doi.org/10.3390/healthcare6040147

للاستشهاد:

حسـن، ناصـر، و بيترايـدس، كونسـتانتينوس. (2025). تطبيقـات علـى نظريـة أهميـة الاعتقـاد فـي 15 مجـال مـن مجـالاً الحيـاة. *مجلـة العلوم الاجتماعيـة*، *53*(2)، 301–333.

To Cite:

Hassan, N., & Petrides, K. V. (2025). An application on belief-importance theory in 15 life domains. *Journal of the Social Sciences, 53*(2), 301-333.