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**mgr Magdalena Mosanya**

Rozprawa doktorska oparta o cykl publikacji

Doctoral thesis based on a series of published articles

**Complex but integrated.**

**Well-being and worldviews of Third Culture Kids (TCKs) in the  
multicultural United Arab Emirates: The role of multicultural identity  
configurations and psychosocial resources**

Rozprawa doktorska napisana pod kierunkiem

prof. dr hab. Anny Kwiatkowskiej

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## **Abstract**

Social changes of the twenty-first century increased the number of people who grow up “between cultures” in “mobile” families. The presented doctoral dissertation deals with broadly understood well-being and worldviews related to global problems (environmentalism) of people defined as third culture kids (TCK) who spent a significant part of their developmental years in culture(s) different from their parents’ culture(s). The features that all TCKs have in common are international mobility (transience), permanent contact with cultural diversity, and the need to negotiate personal, social and cultural identity, depending on the changing cultural context (cultural homelessness).

The dissertation is based on a series of five articles. Three studies aimed to analyse the relationships between the broadly understood well-being of TCKs and their environmental worldviews with multicultural identity configurations (integration, categorisation, compartmentalisation), including psychosocial mediators. The other two studies hypothesised the positive predictive effects of global mindset and cultural intelligence on the functioning of TCKs.

The results showed, among others, that TCKs’ well-being and worldviews depend on internal integration versus identity compartmentalisation and categorisation, not mere exposure to diversity or international mobility. In addition, the research project confirmed the hypotheses about the supporting role of global mindset and cultural intelligence in the functioning of TCKs.

## **Abstrakt w języku polskim**

Zmiany społeczne w XXI wieku zwiększyły liczbę osób, które dorastają "między kulturami" w "mobilnych" rodzinach. Przedstawiona rozprawa doktorska podejmuje temat szeroko rozumianego dobrostanu oraz zainteresowania sprawami globalnymi (ekologia) osób określanych, jako dzieci trzeciej kultury (z angielskiego „third culture kids, TCK”), które spędziły znaczącą część swojego wieku rozwojowego w kulturach innych niż kultura kraju rodziców. Cechy łączące wszystkie TCK to międzynarodowa mobilność, permanentny kontakt z różnorodnością kulturową oraz konieczność negocjowania tożsamości osobistej, społecznej i kulturowej wraz ze zmieniającym się kontekstem kulturowym.

Rozprawa została przygotowana w oparciu o cykl pięciu artykułów. Celem trzech badań była analiza związków pomiędzy szeroko rozumianym dobrostanem TCK oraz postawami prośrodowiskowymi a sposobami konfigurowania tożsamości wielokulturowych (integracją, kategoryzacją, kompartmentalizacją) z uwzględnieniem psychospołecznych mediatorów. W dwóch pozostałych badaniach postawiono hipotezy o pozytywnym wpływie globalnego światopoglądu (global mindest) oraz inteligencji kulturowej na funkcjonowanie TCK.

Wyniki badań m.in., pokazały, iż dobrostan oraz światopogląd (pro-środowiskowy) TCK zależą od integracji tożsamości kulturowych, a nie są bezpośrednim skutkiem międzynarodowej mobilności i kontaktów z różnorodnością kulturową. Dodatkowo badania potwierdziły hipotezy o wspierającej roli globalnego światopoglądu i inteligencji kulturowej w funkcjonowaniu TCK.

**This dissertation consists of five articles published in peer-reviewed journals.**

1. Mosanya, M. & Kwiatkowska, A. (2021). Complex but integrated: Exploring social and cultural identities of women Third Culture Kids (TCK) and factors predicting life satisfaction. *International Journal of Intercultural Relations*, 84, 65-78. <https://doi.org/10.1016/j.ijintrel.2021.07.001> **IF: 2.67**
2. Mosanya, M., & Kwiatkowska, A. (2023). Multicultural identity integration versus compartmentalisation as predictors of subjective well-being for Third Culture Kids: The mediational role of self-concept consistency and self-efficacy. *International Journal of Environmental Research and Public Health*, 20(5), 3880. <https://doi.org/10.3390/> **IF: 3.39**
3. Mosanya, M. & Kwiatkowska, A. (2022). New Ecological Paradigm and Third Culture Kids: Multicultural identity configurations, global mindset, and values as predictors of environmental worldviews. *International Journal of Psychology*. <https://doi.org/10.1002/ijop.12887> **IF: 2.29**
4. Mosanya, M. (2022). Global mindset as a predictor of life satisfaction of Asian international students: The mediational role of self-efficacy. *Education of Economists and Managers*, 63(1), 39–54. <https://doi.org/10.33119/EEIM.2022.63.3> **MEiN: 20**
5. Mosanya, M. (2019). Exploring cultural intelligence relationships with a growth mindset, grit, coping and academic stress in the United Arab Emirates. *Middle East Journal of Positive Psychology*, 5(1), 42-59. **ISSN: 2520-0364**

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## **1. Introduction**

### **1.1. Background**

Social changes brought by the globalisation processes, internationalisation of economies, and ease in mobility increased the numbers of children growing up between the cultures in “mobile” families exposed to cultures different than their parent(s), so-called third culture kids (TCKs) (Fail et al., 2004; Pollock et al., 2017). Intercultural blending on an unprecedented scale has led to novel post-modern identity paradigms reflecting social, cultural, and personal changes. If a child needs to negotiate cultural rules, values and norms, it may pressure a growing-up person tremendously. Grimshaw and Sears (2008), in their theoretical statement regarding the identity of global nomads (TCKs, international students), described their experience as a “quintessential post-modern lifestyle” due to their fragmentation, dynamism and transient “in-making” character (p. 272).

Traditionally migration was a relatively stable phenomenon experienced long-term without a need for instant transitions, and models explaining such a process have been vastly researched (e.g. Berry et al., 2001; Sam, 2006). Castles et al. (2003) observed that forms of migration currently go through diversification processes, motivating social sciences to focus on different kinds of mobilities (Urry, 2000). Vora et al. (2018) further highlighted the necessity for a paradigm shift from thinking about multicultural individuals as a category to thinking about individual-level multiculturalism as a degree to which someone identifies with and internalises more than one culture.

The effect of exposure to cultural diversity while growing up with the lack of necessity to assimilate with the host country has been less understood in the literature, particularly overlooking non-Western third culture individuals. The growing community of “global nomads” is relatively poorly researched, and the existing majority of scientific papers on the topic of TCKs are qualitative and very personal (Trąbka, 2013). Some recently appearing dissertation projects have been tapping into the problem of non-Western TCKs in a phenomenological manner (Mizutani, 2020), but quantitative studies are scarce. The topic area concerning new multicultural and transient identities and how individuals deal with internal cultural diversity has yet to be sufficiently explored (Lilgendahl et al., 2018).

Another challenge the globalised world faces are the dispersion and complexity of ecological problems like global warming and depletion of natural resources, which demand collaborative work at the international level (Dunlap et al., 2000). TCKs' exposure to cultural diversity during developmental years might support global issues engagement and ecocentric worldviews via their extended, hybrid but integrated cross-cultural identity, global mindset and values (Mosanya & Kwiatkowska, 2022). Consequently, multicultural identity configurations could also impact the pro-environmental attitudes of TCKs as they vary predominantly in inclusiveness relevant to environmentalism.

Hence the present dissertation explores TCKs' social and cultural identities to predict factors supportive of their well-being, simultaneously looking at predictors of their ecological engagement. It must be stated that this dissertation is grounded in the specific multicultural context of The United Arab Emirates (UAE), where, according to recent statistics, the ratio between expatriates and local Emirati citizens is 9 to 1 (Global Media Insight, 2021). The UAE is a multicultural country that promotes integration and diversity as a state policy, with many young residents categorised as TCKs. Accordingly, the UAE constitute an exciting hub for TCK-related studies.

## **1.2. Multicultural context of the United Arab Emirates**

Specific multicultural social characteristics of the UAE resulted from fast economic growth and favourable settlement conditions for expatriates. Due to its flourishing economy, the UAE has attracted many expatriates to settle in (mainly for a limited duration). In the UAE, most students fall into the TCK category due to their temporary residency status and lack of opportunities to become naturalised (Dillon & Ali, 2019). Since there is no need for assimilation with native culture, residents of the UAE coexist, cultivating their home cultural traditions bonded by common law and economy but not cultural norms.

Growing up in the UAE is far from typical, and every social encounter may seem like a journey overseas. The country as a whole celebrates diverse cultural and religious holidays. In the UAE, citizens live in cultural relativity, an actual post-modern dynamic and hybrid society with no dominant cultural paradigm. This may come with advantages, such as the development of openness, flexibility, and cognitive strength, but it can also have drawbacks in the sense of confusion about one's roots.

### **1.3. Third culture kids**

Due to the rise of multinational corporations with branches around the globe, more and more children are raised in a culture(s) other than their parents and belong to the quasi-social category of third culture kids recognised by many scholars (Phuwit, 2019; Pollock et al., 2017; Stokke, 2013). Third culture kids are described as individuals who grew up in a culture or several cultures different to that of their parents (or country given on their passport), usually due to work-related migrations, which results in meaningful exposure to diversity during childhood and adolescence (Pollock et al., 2017). Furthermore, ‘third culture’ is defined as a shared commonality of those living an internationally mobile lifestyle. It indicates that TCKs may configure a distinctive cultural identity (third culture) that is neither their parents’ culture (first culture) nor the host culture (second culture) (Pollock et al., 2017). A similar phenomenon can be found in Bhabha’s (1994) theory of third space, which refers to the hybridity of the identities of cross-cultural individuals that are fluid and constantly being made. Such cross-cultural exposure significantly influences TCKs’ sense of identity, relationships with others, and worldviews (Pollock et al., 2017; Stokke, 2013).

Despite considerable differences among third culture kids, Ruth and John Useems (as cited in Pollock et al., 2017), who coined the term, were able to accentuate significant intragroup parallels, namely lack of belongingness (cultural homelessness) and impermanence (transience). These two factors have been shown in the literature to significantly alter the trajectories of TCKs’ functioning. TCKs usually only migrate for a limited period and expect repatriation to their home country. These processes may stop them from fully acquiring the local culture paradigm; instead, they cultivate both their parents’ and host culture(s) to a certain degree. That differentiates TCKs from other cross-cultural kids (CCKs) who move overseas to stay permanently and undergo the acculturation process.

It must be noted that TCK individuals increasingly identify themselves as a separate group with a shared identity (Jung, 2016; Stokke, 2013) and create organisations (e.g. Mu Kappa) to promote complex identities and provide support to people with multicultural and “nomadic” experiences.

### **1.3.1. Advantages of being TCK**

There are multiple advantages to being TCKs, like multilingualism, cultural sensitivity, an increased level of global mindset and leadership skills (Pollock et al., 2017; Stokke, 2013). TCKs also are characterised by cultural intelligence (Tarique & Weisbord, 2013), cosmopolitanism, and expanded worldviews (Pollock et al., 2009). According to Westropp et al. (2016), TCKs possess competencies in dealing with the international environment. Such intercultural competencies were further shown to support bicultural individuals' well-being (Bennet & Bennet, 2004). With such a broad, comprehensive, inclusive mindset and skills, TCK individuals, as global citizens, could also exhibit more pro-environmental attitudes.

It is worth noting that for third culture individuals, their cultural distinctiveness can be regarded as a “constructive marginality” (Fail et al., 2004). Lam and Selmer (2003) referred to constructive marginality as the ability to create a sense of wholeness out of the diverse experiences of TCKs. Third culture individuals may attribute their uniqueness to their cultural richness, increasing self-evaluation and life satisfaction (Fail et al., 2004). Hence, TCKs' cultural complexity, fluidity, and ambiguity might constitute positive sources of their uniqueness (Stokke, 2013).

### **1.3.2. Disadvantages of being TCK**

However, TCKs exposed to multiple cultural paradigms may have issues relating to others and hence may feel like they do not fully belong to any sociocultural category (Fail et al., 2004; Hoersting & Jenkins, 2011; Pollock et al., 2017). Some of the publications' titles concerning TCKs' experiences point to struggles rather than benefits of their upbringing, including *The 10 Biggest Struggles of Being a TCK* (West, 2016) and *Third Culture Kids - The Negative Aspects of Living Overseas* (Sana, 2015). Furthermore, TCKs' cultural and social fragmentation caused by exposure to various norms and values may not allow them to form coherent and consistent identities during developmental years (Erikson, 1980). TCKs struggle to fit in despite often working hard to blend in (O'Shaughnessy, 2014).

As TCKs move between cultures before they have had the opportunity to complete the critical task of personal and cultural identity development, they face issues related to identity and sense of belonging (Pollock et al., 2017), adversely affecting well-being (Hoersting & Jenkins, 2011). Westropp



et al. (2016) stated that distinct experience of TCKs often leads to a heightened sense of isolation. Similarly, in the study based on interviews with TCK women, Walters and Auton-Cuff (2009) observed that they generally felt different from others, regardless of where they lived; they often felt like outsiders. As the authors put it, the “pervasiveness of different” was heard in every story told by TCKs, in how they described their experiences, the places, and their feelings: “Through being different, these women learned more about who they were NOT, before they discovered who they were” (p.764). Besides, TCKs’ distinctiveness was reported as a source of shame and disconnection in the face of misunderstanding and jealousy (Espada-Campos, 2018). Bonebright (2010) even highlighted that TCKs might be at a high risk of developing a sense of marginality due to a lack of sense of belongingness to their home culture after reverse culture shock. Such marginality might, in turn, affect adaptability and well-being.

The defining feature of TCKs’ lives is high mobility (Pollock et al., 2017), which may break TCKs’ developmental routes by setting new goals to achieve, new values to respect, new rules to follow, and giving up the old ones (Lijadi, 2018). A discontinuity and inconsistency of identity may occur if one cannot find support in a new social environment to preserve and develop one’s sense of continuation of a personal narrative across situations. A person interviewed in the study by Lijadi and van Schalwyk (2014) expressed her frustration with the high mobility lifestyle in the following words “I feel like I have to wear a mask wherever I go and a different mask with different people. It is very exhausting” (p. 11). Another issue related to the lack of continuity is the future’s unpredictability. In Lijadi’s (2018) study, TCK participants reported living temporarily during childhood, not knowing what they wanted to do in the future. Such fragmentation might constitute an issue for TCKs’ condition (Yampolsky et al., 2013) as deficits in individual continuity and consistency are associated with negative consequences for the individual.

### **1.3.3. Multicultural identity configurations as predictors of well-being and mindset**

Multicultural individuals are not all alike. Research on biculturalism pointed to the role of the internal identity processes as essential to the outcome of exposure to diversity (Benet-Martínez et al., 2002; Haritatos & Benet-Martínez, 2002). Furthermore, the re-evaluation of acculturation models

motivated by changes to cultural and identity paradigms proposed identity and sociocultural factors as supportive of multicultural individuals functioning (Berger et al., 2019; Safdar et al., 2010).

Identity is commonly understood as a subjectively experienced concept of oneself as a person (Vignoles et al., 2006). The identity process theory (IPT) has brought a novel, dynamic perspective on self-construction, highlighting the socio-psychological processes underlying identity creation and change (Breakwell, 1986; Vignoles et al., 2006, 2011). Such a viewpoint encompasses a constructivist paradigm, within which the identity is characterised as a multifaceted notion continuously undergoing transformations based on interactions with changing contexts. Therefore, identity may take fluid and flexible forms, especially if its constituents are transient, as in the case of third culture individuals. Such an approach seems particularly relevant when discussing new paradigms of TCKs and their identities. For third culture kids, their hybrid identities are fluid and transformative and do not fall into traditional cultural categories.

To encompass cultural pluralism, multicultural individuals ought to engage in specific strategies facilitating their identity building. The cognitive-developmental model of social identity integration (CDMSI) (Amiot et al., 2007) accounts for the different ways multicultural individuals cognitively configure their many cultural identities within their overall identity. Research has identified three types of identity configurations: categorisation, compartmentalisation, and integration (Amiot et al., 2007; Amiot et al., 2018; Yampolsky et al., 2016). The categorisation configuration implies identifying with one cultural group, seeing one identity as predominant, and excluding other identities from the self. In contrast, the compartmentalisation configuration allows an individual to endorse multiple identities, but they are kept in distinct compartments in the self, separate from each other. These identities are context-dependent and activated depending on the social context. The third configuration, integration, occurs when individuals feel that they endorse belonging to different cultural groups. Thus multiple identities are organised within the self so that they are equally essential and form one coherent supra-identity. Integration may enable individuals to establish context-independent superordinate identity encompassing multiple influences (Yampolsky et al., 2013) that cannot be reduced to the sum of its constituent identities (Benet-Martinez et al., 2002; Benet-Martinez & Haritatos, 2005). Integration refers to further reconciliation between multiple cultural paradigms, which may also allow for the

cohesion of oneself. Integrated multicultural identity may involve supra-cultural aspects and may reflect hybridisation, an identity in-between (Bhabha, 1994). The following quote from an interview with TCK supports such thesis “I am a global citizen (..) I have an identity, just not the national one” (Lijadi, 2018, p.23).

#### **1.4. TCKs’ integration and functioning - supporting factors (social bonds, self-efficacy, global mindset, cultural intelligence)**

Berger et al. (2019) highlighted the role of psychosocial factors in the adjustment of international students during their time abroad. In particular, within the Multidimensional Individual Difference Acculturation (MIDA) model (Berger et al., 2019; Safdar et al., 2010), social support, identity factors and perception of hassles (acculturative stress) were deemed essential to the functioning of sojourners. Apart from multicultural identity integration, social ties seem particularly relevant to the discussion on the well-being of TCKs. Bushong (2013), in his groundbreaking book *Belonging Everywhere and Nowhere: Insights into Counseling the Globally Mobile*, which addressed the psychosocial challenges of TCKs, pointed to problems with lack of belonging and fitting in society. Social bonds affect the formation of social and cultural identities of TCKs. Strong family ties, close friendships, and relationships at school or work help individuals choose a social collective as a base for social identity. Also, as Wan and Chew (2013) suggested, social ties may support establishing cultural identity since they serve as a transmission agent of shared cultural knowledge.

Furthermore, self-efficacy appears to be significant to identity and the general functioning of multicultural individuals, though its role might be more intermediary (Vignoles et al., 2006). An individual’s sense of self-efficacy determines whether one sets and acts on goals. Bandura (1989) theorised that self-efficacy is a context-specific judgment about one’s ability. Furthermore, self-efficacy is associated positively with achievement, cognitive effectiveness and persistence (Honicke & Broadbent, 2015) in Western cultures. Similar results have also been seen among collectivist cultures, where self-efficacy improved self-esteem and social functioning (Afari et al., 2012) and decreased depressive symptoms (Mosanya & Petkari, 2018). Moreover, a high perceived self-efficacy supported self-evaluation and functioning (Milam et al., 2019) and buffered potential negative impacts of recurrent

relocations on TCK adolescents' coping and adjustment (Hoersting & Jenkins, 2010). For TCKs, self-efficacy might be, on one side, impaired due to a lack of control over multiple relocations and inevitable change. On the other hand, self-efficacy might be enhanced as a result of the vast cross-cultural competencies TCKs possess, including a global mindset (Stokke, 2013). Therefore, it is essential to assess self-efficacy as an intermediary variable that may protect self-esteem and well-being from the negative impact of cultural fragmentation of TCKs.

A global mindset is another factor that should be considered. Stokke (2013) suggested that the central aspect of the global mindset for cross-culturally exposed individuals was a "passion for diversity." Cultural and cognitive aspects of a global mindset, namely high interest in other cultures, positive assessment of culturally different others, ability to perceive similarities between diversities, facilitate cultural learning and gaining knowledge, are essential for the development of cultural identity. Additionally, a global mindset supports questioning the categorical identity (Kubota, 2010). An internalisation of more than one cultural worldview (ethnorelativism) is forming an opposite frame of reference to ethnocentrism (Bennett, 2017). Therefore, a global mindset creates favourable conditions for the organisation of cultural identities in an integrated manner rather than categorical or compartmentalised.

Lastly, a study by Presbitero (2016) demonstrated the role of cultural intelligence, also referred to as a cultural quotient, CQ), as an essential supporting factor in dealing with acculturational problems for adult TCKs. Cultural intelligence has been linked to success and performance in international environments ranging from business organisations to social institutions (Earley & Ang, 2003; Henderson et al., 2018). Therefore, the assessment of the possibility that TCK individuals with multiple cultural backgrounds due to higher levels of CQ experience less distress and have more adaptability and coping skills in the multicultural academic environment is timely.

## **2. Research contributions**

This dissertation project consists of five research studies conducted with multicultural individuals who identified themselves as TCKs based on the definition of Pollock et al. (2017) "Check YES if you have been raised in a culture other than that of your parents (or the culture of the country given on your

passport) for a significant part (more than one year) of early developmental years 6-18.” The participants were of non-Western origin and residents of the United Arab Emirates.

Although biculturalism has been previously studied (Bent-Martinez & Haritatos, 2005), there is a scarcity of quantitative and generalisable research on identity structure and the psychological well-being of TCK individuals who usually have more complex cultural identities than biculturals. The main aim was to expand the existing knowledge on social and cultural identities of TCKs and explore the relationships between multicultural identity configurations categorisation, compartmentalisation, and integration (Yampolsky et al., 2016) adapted from the CDMSI model of Amiot et al. (2007) and TCKs’ functioning. Further, the roles of psychosocial factors of a global mindset, social bonds, self-efficacy and cultural intelligence were also analysed.

Three first studies (Study 1, Study 2, Study 3) employed Multicultural Identity Integration Scale (MULTIIS; Yampolsky et al., 2016) to determine the configurations of multicultural identities as predictors of well-being and pro-ecological mindset with mediating roles of psychosocial factors. The two later studies (Study 4, Study 5) have explored the individual contributions of global mindset and cultural intelligence to the functioning of multicultural TCKs.

## **2.1. Study 1 – Exploring social and cultural identities of women Third Culture Kids (TCK) and factors predicting life satisfaction.**

**Mosanya, M. & Kwiatkowska, A. (2021).** Complex but integrated: Exploring social and cultural identities of women Third Culture Kids (TCK) and factors predicting life satisfaction. *International Journal of Intercultural Relations*, 84, 65-78. <https://doi.org/10.1016/j.ijintrel.2021.07.001>

It was an explorative study with female TCKs in the UAE motivated by recalls from the literature that creating collective identity might become challenging for TCKs as traditional categories of nationality, ethnicity, and geographically described communities do not constitute sufficient social identity sources (Nette & Hayden, 2007). In the literature, labels ascribed to the TCK include culturally homeless, culturally rootless, or suspended between cultures (Vivero & Jenkins, 1999; Pollock et al., 2017; Hoersting & Jenkins, 2011). There has been a long-established approach in literature associating cross-cultural identity and frequent geographical relocations with impoverished well-being (Hoersting

& Jenkins, 2011). On the other hand, as Pollock et al. (2017) observed, being rooted in various cultures might make TCK feel at home anywhere. However, no generalisable studies existed to date.

Within theoretical paradigms of social and cultural identities, the study aimed to explore the uniqueness of TCK females' cultural and social identities with multiple objectives. Firstly, we aimed to describe the configurations and prevalence of specific forms of social and cultural identities. Secondly, we attempted to investigate the TCK characteristics, such as factors associated positively or negatively with cross-cultural individuals' well-being. Based on the literature, we selected the following variables: the number of countries where TCK lived, languages spoken, global mindset, social inclusiveness and essentialism.

The mixed-methods approach to exploring the social and cultural identity of TCKs was employed. We classified social identity into four we-concepts: we-group, we-category, we-attributive and we-axiological (Jarymowicz, 2002, 2015), and cultural identity into three configurations: integration, categorisation and compartmentalisation (Yampolsky et al., 2016). We used the we-concept weighted scores to describe the social identity configurations and performed other statistical procedures.

The results suggested that TCKs define social identity predominantly based on passport country (we-category) and relationships with family and friends (we-group). We indicated that axiological (value-based) social identification and global mindset buffered essentialism and categorisation known to disturb cross-cultural relationships and well-being. There was a general tendency for integrated cultural identity, with cultural configurations of categorisation and compartmentalisation correlating positively with essentialism. Hierarchical regression analysis evidenced that integrated multicultural identity, global mindset, and social inclusiveness were significant positive predictors of life satisfaction for female TCKs.

These results fed into a better understanding of the TCKs' configurations of collective identities and highlighted new factors related to TCKs' well-being. The global mindset, social inclusiveness and integration are dynamic concepts that can be stimulated via environmental inputs. Interventions targeting these variables could improve the well-being of TCKs.

## **2.2. Study 2 – Multicultural identity integration versus compartmentalisation as predictors of subjective well-being for Third Culture Kids.**

**Mosanya, M., & Kwiatkowska, A. (2022).** Multicultural identity integration versus compartmentalisation as predictors of subjective well-being for Third Culture Kids: The mediational role of self-concept consistency and self-efficacy. *International Journal of Environmental Research and Public Health*. <https://doi.org/10.3390/>

Study 2 built upon Study 1 and aimed to explore the mechanism behind the predictive effect the multicultural identity configurations on TCKs' well-being. We have proposed as mediators aspects of self-concept evidenced in the literature as relevant to multicultural individuals, namely self-concept consistency and self-efficacy. The exposure to different cultural contexts combined with high mobility and frequent transitions from place to place may threaten TCKs' sense of consistency, understood as being the same in time and across situations. Furthermore, being an object of decisions made by somebody else (parents, institutions) concerning where to live or study may diminish one's sense of agency and frustrate self-efficacy. In addition, a sense of self-consistency and self-efficacy are associated with positive emotions and enhanced well-being, whereas if frustrated, these dimensions of self may be related to ill-being (Easterbrook et al., 2012). Likewise, a sense of self-efficacy for individuals with multiple cultural selves facilitates the sociocultural adaptation process and supports well-being.

We proposed a complex model; hence parallel mediations, which included more than one mediator, were deemed most appropriate. The results highlighted the enhancing role of cultural integration (in contrast to compartmentalisation) in third culture individuals' well-being and pointed to its supportive role in forming self-consistency and self-efficacy. We also partially explained the mechanism behind the positive changes brought by multicultural identity integration suggested in the existing literature. Previous studies indicated that multiculturalism stemming from integration and acceptance, as opposed to exclusion-based assimilation, has created a favourable social context and increased self-esteem, leading to boosted well-being (Sue & Sue, 2003). Our study expanded such claims to the internal cultural diversity of third culture individuals.

### **2.3. Study 3 – Multicultural identity configurations, global mindset, and values as predictors of TCKs’ environmental worldviews.**

**Mosanya, M. & Kwiatkowska, A. (2022).** New Ecological Paradigm and Third Culture Kids: Multicultural identity configurations, global mindset, and values as predictors of environmental worldviews. *International Journal of Psychology*. <https://doi.org/10.1002/ijop.12887>

The ecological degradation acknowledged by scientists and global leaders is linked to human activity, predominantly to the development of industrialised societies (Jorgenson, 2006). There is a global drive towards the New Ecological Paradigm (NEP), which assumes interdependence between nature and human thriving and sets limitations to human activity and growth (Dunlap et al., 2000). Hence, the investigation of factors supporting ecocentrism is relevant.

This paper explored whether multicultural individuals with mobile lifestyles, TCKs, could endorse ecocentrism via their extended, hybrid but integrated cross-cultural identity, global mindset and values of self-transcendence and openness. Similarly, the study assessed whether exclusive configurations of multicultural identities, such as categorisation or compartmentalisation, encourage conservative values and anthropocentric traditional social paradigms. Our research questions and hypotheses were rooted in the considerable research that highlighted the role of culture and identity in dealing with environmental attitudes formation (Brieger, 2018; Duff et al., 2022). Brieger (2018) emphasised the role of social identity in fostering environmental concern. Specifically, a tendency to protect the environment related to the inclusiveness of the groups on which identity was based (community, nation, world). World identity, defined as identification with all human beings, was most beneficial to environmental concerns (Brieger, 2018). Yampolsky et al. (2016) argued that multicultural identities vary in inclusiveness (integration versus categorisation and compartmentalisation). Consequently, environmental attitudes may also be developed differently depending on the identity configurations. In this study, NEP was operationalised as ecocentrism versus anthropocentrism. We used path analysis to test a set of hypotheses that, if correct, confirm the effect of identity configurations on NEP with values and global mindset in the role of mediators.



The results linked pro-environmental worldviews with multicultural identity and its integration. Innovative directions were consequently set in multiculturalism and environmentalism discourse by examining the intermediary role of a global mindset and values of self-transcendence and openness.

#### **2.4. Study 4 – Global mindset as a predictor of life satisfaction of international students: The mediational role of self-efficacy.**

**Mosanya, M.** (2022). Global mindset as a predictor of life satisfaction of Asian international students: The mediational role of self-efficacy. *Education of Economists and Managers*, 63(1), 39–54. <https://doi.org/10.33119/EEIM.2022.63.3>

In this study, we have explored a predictive effect of global mindset on TCKs' life satisfaction with mediating role of self-efficacy. The literature presents a global mindset as essential for international leaders and individuals in multicultural environments (Den Dekker, 2013). It seems particularly relevant to the young professional TCKs living in the multicultural environment of the United Arab Emirates. Studies on cross-cultural effectiveness and abilities suggested that multicultural individuals might possess abilities to interact better within culturally diverse contexts (Caligiuri & Tarique, 2012; Thomas, 2002). At the same time, little is known about the mechanism explaining the positive impact of cross-cultural abilities and sensitivity incorporated in a global mindset on the well-being of multicultural individuals.

The results of our research confirmed the prominent role of a global mindset in supporting the life satisfaction of individuals with multicultural identities. As a result, the study validated preliminary suggestions from study 1. Our findings also highlighted the global mindset's positive influence on the general self-efficacy of TCKs. Lastly, the mediation analysis explained self-efficacy's intermediary role in the relationships between global mindset and life satisfaction.

Such outcomes tap into the idea that a global mindset assists in integrating cultural diversity, which leads to increased capabilities in dealing with a cross-cultural environment (Den Dekker, 2013). Therefore, active participation in diversity as a competent contributor can be predictive of TCKs' life satisfaction.

## **2.5. Study 5 – Exploring cultural intelligence relationships with growth mindset, grit, coping and academic stress among TCKs.**

**Mosanya, M.** (2019). Exploring cultural intelligence relationships with growth mindset, grit, coping and academic stress in the United Arab Emirates. *Middle East Journal of Positive Psychology*, 5(1), 42-59.

This research intended to explore the relationships of cultural intelligence (CQ) with positive psychological notions of academic success for multicultural TCK students living in the UAE. Based on the established position of cultural intelligence as a predictor of success and performance in international business environments, we proposed that CQ would also support academic success for TCKs. We measured academic flourishing via positive psychology notions of growth mindset, grit, coping with conflict and academic stress. In this study, we were also interested in determining whether there were differences between students classified as third culture individuals and those raised in one culture concerning levels of cultural intelligence.

The results confirmed the hypothesis that the higher level of cultural intelligence was characteristic of individuals with lower academic stress. Multiple regression analysis showed that cultural intelligence was also the strongest positive predictor of coping. The outcome confirmed that culturally intelligent individuals could deal with conflict and stress more effectively. Such results are consistent with the literature on the role of CQ in the success of global business organisations (Ramalu et al., 2010), and our study contributed to the literature surrounding the importance of CQ from the business to the educational context.

Contrary to prior literature (Tarique & Takeuchi, 2008; Stokke, 2013), which proposed that multinational corporations would seek to recruit people possessing TCK characteristics as better equipped for cross-cultural tasks, the present study did not confirm a higher level of cultural intelligence in TCKs compared to non-TCK residents in the UAE. We discussed such surprising findings in terms of the specificity of the UAE multicultural context and the young age of the participants. Individuals who classified themselves as non-TCKs may have acquired similar cross-cultural abilities even if exposed to multiculturalism outside developmental years (0-18), but still in their early 20s. Perhaps to

foster cultural intelligence, it is sufficient to actively interact with the UAE's culturally diverse and inclusive environment, even if it happens outside of developmental years.

### **3. Limitations**

Despite evident significance, some limitations must be considered when interpreting our results. These relate to sample characteristics, employed measures and the models' explanatory value. Firstly, the sample size of the first study was limited, and the following studies had unequal gender distributions, which may have affected the reliability of the outcome. Additionally, TCK participants were from diverse origins, with a prevalence of South Asian individuals. The potential influence of their cultural backgrounds on our results cannot be excluded, limiting our study's generalizability.

Another general limitation was related to the identification of the participants as TCKs, assumed based on a single-item definition. According to Vora et al. (2008), it is a common issue related to measurements of multiculturalism within oneself, which is usually assessed with single-item questions (yes/no) or continuous single-item scales (Benet-Martinez et al., 2002). Further studies that would also measure the level of identification with TCKs are recommended. Additionally, there has been some criticism regarding the possibility of people with similar life experiences constituting a social category or a "culture" (Pearce, 2011). Whilst most literature on the topic relies on the self-identification of adult TCKs, this is still only a quasi-social category. Hence, the results of the present evaluations may also apply to individuals categorised more broadly as biculturals, multiculturalists, or sojourners.

Furthermore, the levels of internal consistency for the employed global mindset measure were relatively low, which posed another limitation. However, the global mindset is a novel concept, and we refer to Nunally and Burstein (1994) pointing to lower levels of alpha as acceptable for exploratory research. Lastly, all the models explained less than 25 % variances in outcome variables, leaving space for additional predictive factors unexplored within our research project. Other psychological, social and environmental variables could likely expand our models, motivating further research.

### **4. Conclusions**

This dissertation project has drawn on established theories and has provided an extensive exploratory analysis of the complex social and cultural identities of TCK individuals in the multicultural United Arab Emirates with few main contributions. Firstly, our research findings suggested that not

mere exposure to diversity, but internal integration versus identity compartmentalisation and categorisation, moderates TCKs' broadly understood well-being and mindset. Secondly, the mechanisms behind such an effect have been explored. Our study pointed to multicultural identity integration as vital to the positive functioning of TCKs via its enhancing effect on self-efficacy and self-consistency. Alternatively, TCKs with a more compartmentalised multicultural identity might have decreased well-being partially because of a reduced sense of self-consistency. We further presented the role of a global mindset as a facilitator of the TCKs' life satisfaction, its buffering role to essentialism and its supportive effect on ecocentric views. Also, cultural intelligence has been confirmed as a supporting factor to academic success and a buffer to stress for TCKs. Moreover, the current project highlighted how identity integration, global mindset and self-transcendent values could assist in developing the new ecological paradigm.

Cockburn (2002) claimed that globally mobile children like TCKs are an example of the future population of the United Nations. Hence, studying TCKs' identities may build valuable knowledge for current and future generations. Accounting for increasing numbers of multicultural individuals with transient lifestyles worldwide, this research outcome is valuable to social and health sciences. The current project also motivates interventions facilitating TCKs' functioning. In particular, the integration of cultural paradigms, global mindset, and cultural intelligence can be stimulated via environmental inputs. Interventions targeting these variables could potentially improve the well-being and inclusive mindset of TCKs.

I would like to conclude with a quote by sociologist Ann Baker Cottrell (as cited in Lang, 2002, p.2), "TCKs are showing us where we are going, and we are just catching up".

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## 6. Research publications

### 6.1. Study 1 – Complex but integrated: Exploring social and cultural identities of women Third Culture Kids (TCK) and factors predicting life satisfaction

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## Complex but integrated: Exploring social and cultural identities of women Third Culture Kids (TCK) and factors predicting life satisfaction

Magdalena Mosanya \*, Anna Kwiatkowska

*Institute of Psychology, Polish Academy of Science, Poland*

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### ABSTRACT

The 21<sup>st</sup> century, defined by cultural diversity and global mobility, has triggered an unprecedented increase in multicultural individuals, defined as people who internalised more than one culture. Contrasting evidence related to multiculturalism calls for more explorative research to understand cross-cultural identities. The present study explored social and cultural identities of adult female Third Culture Kids (TCKs) ( $n = 122$ ), multicultural individuals who live mobile lives, and adjustment factors of a global mindset, social inclusiveness and essentialism to find predictors of life satisfaction. We classified social identity into four we-concepts: we-group, we-category, we-attributive and we-axiological, and cultural identity into three configurations: integration, categorisation and compartmentalisation. Our results suggested that TCK define social identity predominantly based on passport country (we-category) and relationships with family and friends (we-group). We indicated that axiological (value-based) social identification and global mindset buffered essentialism and categorisation known to disturb cross-cultural relationships. There was a general tendency for integrated cultural identity, with cultural configurations of categorisation and compartmentalisation correlating positively with essentialism. Hierarchical regression analysis evidenced that integrated multicultural identity, global mindset, and social inclusiveness were significant positive predictors of life satisfaction for female TCK. These results feed into a better understanding of the TCK configurations of collective identities and highlighted new factors related to TCK well-being.

### Introduction

Multicultural individuals who internalised more than one culture (Benet-Martinez & Hong, 2014) have become a significant aspect of the internationalised world, and their numbers are increasing worldwide (McDonald, 2010). Contrasting evidence on multiculturalism calls for research to understand cross-cultural identity (Benet-Martinez & Haritatos, 2005), as such phenomena will become increasingly prevalent. Especially relevant seems exploration of factors that may facilitate the well-being and adjustment of Third Culture Kids (TCK), who might naturally possess cross-cultural competencies to answer the globalised world's changing character (Stokke, 2013). An example of the country in which many TCK reside is the United Arab Emirates (UAE). Due to its flourishing economy, the UAE has attracted many expatriates to settle in. Most students fall into the TCK category in the UAE, as the country has a

\* Corresponding author at: Institute of Psychology, Polish Academy of Science, 00-378 Warsaw, Jaracza 1, Poland.  
E-mail address: [magdalena.mosanya@sd.psych.pan.pl](mailto:magdalena.mosanya@sd.psych.pan.pl) (M. Mosanya).

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nine to one ratio between expatriates and local Emirati citizens (Global Media Insight, 2020), and there is no push to assimilate with the local culture. Furthermore, students in the UAE are exposed to diverse cultural paradigms early on and predominantly create their "third culture".

#### Defining Third Culture Kids

The term "Third Culture Kids" (TCK) was introduced by sociologists Ruth and John Useem in the late 1950s (as cited in Pollock, Van Reken, & Pollock, 2017), referring to individuals who spent a significant part of their formative development outside their parents' country. Despite variability within a TCK population, the Useems established intragroup similarities, namely experienced transience and homelessness. Historically, TCK characteristics mostly applied to children of missionaries and diplomats. However, with the increasing globalisation and internationalisation of the business, the most significant part of the TCK collective constitute children of employees on international posts (Phuwit, 2019). In many places worldwide, including the UAE, cross-cultural children are becoming the norm rather than the exception (Dillon & Ali, 2019). Despite not being yet a widely used social identity category, TCK began to be proposed as self-identification by many individuals with mobile lifestyles (Jung, 2016; Rustine, 2018; Stokke, 2013). As a unique group, TCK was identified in fields of education (Dillon & Ali, 2019; Espinetti, 2011) and mental health (Barringer, 2001; Melles & Frey, 2014; Washington & Gadikar, 2016), with some authors referring to TCK as an invisible minority (McDonald, 2010).

The example of self-identification as TCK is demonstrated by the following quotes: "TCK fits my nomadic lifestyle and, for me, has reinforced the notion that we are all products of our experience" (K.R., 2011), "me as ti-si-kayz", "my TCK tribe" (Jung, 2016), "one month after my birth, my parents started my life as a TCK" (Meinberg Paganini, 2020), "my status as an adult TCK" (Stokke, 2013). Furthermore, TCKs have multiple associations like the *International Society for Missionary Kids*, *Mu Kappa*, *Families in Global Transition and Interaction International*. *Mu Kappa* association, for example, gives young people with transient cross-cultural experience a virtual space to find peers and a platform on which TCK can build their identity.

The term "third culture" suggests that TCK may develop a unique cultural identity that is neither their parents' culture (first culture) nor the host culture (second culture) (Pollock et al., 2017; Useem & Cottrell, 1996). Third culture (also called after the Useems interstitial culture) is defined as a "shared commonality of those living an internationally mobile lifestyle" (Pollock et al., 2017). The theory of third space, developed by Homi Bhabha, helps understand the third culture of cross-cultural individuals (Bhabha, 1994). For Bhabha, a third space is not a physical place but an interstitial location between and beyond borders where two (or more) cultures meet, confront each other and eventually mix, and where hybrid identifications and cultural transformations happen. Hybridity suggests an interaction between cultures and rejects the idea of fixed and stable identities in favour of more fluid and plural. Bhabha, showing his anti-essentialist attitude toward culture, questions the concept of homogenous, closed and complete national cultures, highlighting that they are always in the process of becoming and changing (Jamshidian & Pourgivi, 2019).

Pearce (2011) presents an alternative perspective on the TCK phenomenon and argues against transiently raised individuals constituting a culture. Pearce explains that culture as such could not develop in a group of individuals who are only connected by similar experiences, not sharing history or space. This perspective reflects the traditional, positivistic approach to culture, which is - in most cases - a national culture. On the contrary, Hayden (2012) argues that the sense of belonging to a globally mobile group is associated with relationships with similar others rather than a specific place, such as a country. Therefore, the "third culture" would then be somewhat reflected in a similar mindset and shared patterns of life choices that cause sameness not geographically or generationally bounded (Hayden, 2012; McLachlan, 2007), reflecting post-modern perspective.

#### Advantages to being TCK

The multicultural identity of TCK carry both positive and negative implications, and the advantages of the TCK lifestyle are extensive. TCK benefit from exposure to many different cultures and high mobility, which positively impacts social and cognitive skills like intercultural sensitivity, an expanded worldview (Fail, Thompson, & Walker, 2004; Pollock et al., 2017; Traffon, 2003) and positive diversity beliefs (de Waal, Born, Brinkmann, & Frasch, 2020). TCK demonstrate intercultural literacy, adaptability, flexibility (Stokke, 2013), cosmopolitanism (Cho, 2009), increased tolerance (Germer, Perry, Moselle, & Archbold, 1992), decreased racial prejudice (Viser, 1986), facilitated relatedness with others, volunteering engagement (Useem & Cottrell, 1996), and predisposition for multilingualism and global mindset (Stokke, 2013).

A global mindset is a relatively new concept that facilitates cross-cultural interaction and provides a critical advantage in a globalised world. It has recently attracted many scholars' attention (e.g., Andresen & Bergdolt, 2017; den Dekker, 2011; French & Chang, 2016; Gupta & Govindarajan, 2002; Levy, Beechler, Taylor, & Boyacigiller, 2007; Lovvorn & Chen, 2011). Levy et al. (2007) proposed a comprehensive definition of the global mindset as a "highly complex cognitive structure characterised by an openness to and articulation of multiple cultural and strategic realities on both global and local levels, and the cognitive ability to mediate and integrate across this multiplicity" (p. 27). Those with a global mindset are described as having a passion for diversity (Stokke, 2013), vast cultural knowledge (den Dekker, 2011), cultural intelligence (Andresen & Bergdolt, 2017), and high cognitive abilities (Levy et al., 2007). Hence, a global mindset's cultural and cognitive components could better adjust an individual to a highly diverse and complex world.

#### Disadvantages to being TCK

On the other hand, there is some evidence suggesting that those with a cross-cultural upbringing have impaired psychological well-

being as a result of decreased self-esteem (Hoersting & Jenkins, 2011), lower success rate (Burrus, 2006), and increased vulnerability to emotional pain and distress (Goodwin, Cook, & Yung, 2001). Also, TCK may experience grief and loss of friends or places (Espinetti, 2011), and consequently, feelings of loneliness (Cockburn, 2002). TCK' transient lifestyle might inhibit the development of healthy social relationships and disconnect TCK from social support, which intensifies loneliness (Lee & Goldstein, 2016). Furthermore, individuals with cross-cultural backgrounds reported an increased potential for acculturative stress and readjustment distress when relocating to countries in which they are passport-holders (Pollock et al., 2017).

The most severe disadvantage to being TCK relates to identity (e.g., Fail et al., 2004; Pollock et al., 2017; Vivero & Jenkins, 1999). Multiple shifts in location, culture, and languages during childhood years create many challenges to forming mature, solid, and integrated personal, social, and cultural identities of TCK individuals. Frequent moves might threaten self-continuity, the sense that one's past, present, and future are meaningfully connected, which is one of the defining features of personal identity (Becker et al., 2018). During adolescence, the outlook on oneself, values, and worldview forms based on the cultural environment. If such context is unclear or consists of contradictory cultural paradigms, it might impact the coherence of values and norms that underlie the self. For children raised in one culture, the country of origin is the most significant category for social identity creation (Nette & Hayden, 2007). Creating collective identity might become challenging for TCK as traditional categories of nationality, ethnicity, and geographically described communities do not constitute sufficient social identity sources (Hayden, 2012). In the literature, labels ascribed to the TCK include culturally homeless, culturally rootless, or suspended between cultures (e.g., Vivero & Jenkins, 1999; Pollock et al., 2017; Hoersting & Jenkins, 2011), suggesting that TCK face almost unresolvable problems. On the other hand, as Pollock et al. (2017) observed, being rooted in various cultures might make TCK feel at home anywhere.

#### Social identity

The concept of social identity as presented in the Social Identity Theory (SIT), developed by Tajfel (1974), is defined as a part of one's self-concept which derives from knowledge of membership of a social group (or groups) together with the emotional significance attached to that membership. According to SIT, the primary psychological mechanism underlying social identity formation is a need to have a positive self-image that might be secured by belongingness to a group positively evaluated. The process of choosing a particular group (or groups) that can meet one's needs is explained by the Self-Categorization Theory (SCT) (Tajfel & Turner, 1986). The SCT assumes that self-categorisation, i.e., including oneself to a given social category, can exist at different levels of abstraction: the interpersonal (subordinate level, self as an individual person), intergroup (intermediate level, self as a group member), and inter-species (superordinate level, self as a human being) (Turner & Reynolds, 2012).

Building upon SIT and SCT, Maria Jarymowicz (2002; 2015) introduced the we-concept, associated with different forms of social identities, which can develop on intermediate and superordinate abstraction levels. She identified four types of the we-concept, implying four types of social identity: (1) the group identity (small groups where each member has direct contact with all members, e.g., family), (2) the categorical identity (established social categories, with well-defined boundaries, e.g., gender, nationality), (3) the attributive identity (based on a more abstract criterion, such as shared interests, activities) (4) the axiological identity (based on shared values, e.g., animal lovers, freedom fighters). It should be emphasised that the types of we-concept vary as per their level of inclusiveness. Attributive and axiological we-concepts are more inclusive than we-group and we-categorical, which means that these first concepts may embrace any individual, regardless of membership in a gender, profession, national, or cultural category.

What is essential in Jarymowicz's (2002) reasoning is that individuals, referring to their social identity, use predominantly social categories such as gender, profession, and nation. Yet, this option is just one among a variety of other options in building social identity. It is in line with some authors' claims that TCK may rely on direct relationships with similar others while defining their social identity rather than looking for members of the same social category. Nette and Hayden (2007) highlighted that friendship constitutes an anchor for developing an integrated identity for "global nomads". Additionally, according to Jordan (1981), artificial reliance on passport countries in identity-building could be limiting and harmful to TCK. The question arises with whom the TCK identify predominantly and what social identity is the most prevalent?

#### Cultural identity

Cultural identity, according to Wan and Chew (2013), is "a part of an individual's self that signals the individual's connection with a culture" (p. 247). Culture is understood as knowledge, traditions, a collection of ideas, values, beliefs, norms, and practices, shared or widely distributed in a given population (Hong, Wan, No, & Chiu, 2007). In other words, cultural identity is an integral part of the self-concept constructed via the process of learning and sharing within a distinctive cultural setting (Kim, 2007). Wan and Chew (2013) described the development of cultural identity as the process through which an individual acquires knowledge about cultural norms, beliefs, values, and practices and attributes to oneself a label relevant to a membership in a given cultural community. In traditional societies, most members of the community share the same cultural identity. For individuals under the influence of different or contradictory cultural paradigms, cultural identity might be less precise (Van Reken, 2012). Hence, for TCK, each cultural identity element would be multiplied and either complementing or challenging to other components.

In terms of Bhabha's third space theory (1994), this process could be understood as a hybridisation. For Bhabha, hybridisation means an interaction among different cultures, during which they influence each other and merge without giving up or neglecting their specific cultural features, converging into an ultimate product, i.e. we would say - third culture identity. Furthermore, Moje et al. (2004) described the third space as a transformational bridge that allows for seeing the contradictions as constructive, not conflicting. While Bhabha was referring to the disparity in power between cultures in contact (colonial superiority), for TCK, the hybrid creation

being as a result of decreased self-esteem (Hoersting & Jenkins, 2011), lower success rate (Burrus, 2006), and increased vulnerability to emotional pain and distress (Goodwin, Cook, & Yung, 2001). Also, TCK may experience grief and loss of friends or places (Espinetti, 2011), and consequently, feelings of loneliness (Cockburn, 2002). TCK' transient lifestyle might inhibit the development of healthy social relationships and disconnect TCK from social support, which intensifies loneliness (Lee & Goldstein, 2016). Furthermore, individuals with cross-cultural backgrounds reported an increased potential for acculturative stress and readjustment distress when relocating to countries in which they are passport-holders (Pollock et al., 2017).

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may follow different configurations from dominance exerted by one culture (categorisation) via compartmentalisation and, finally, integration.

Researchers offer to explain such different ways that individuals might cognitively and psychologically use to organise multiple cultural identities. Amiot et al. (2007) proposed the Cognitive-Developmental Model of Social Identity Integration (CDSMI), which encompasses four main identity shaping stages: anticipatory categorisation, categorisation, compartmentalisation, and integration. Yampolsky, Amiot, and de la Sablonniere (2016) drawing from the CDSMI, evidenced for biculturals three identity configurations: categorisation, compartmentalisation, and integration. First, categorisation defines self through identification with only one of the held identities while excluding other identities from the self. Pollock et al. (2017) also recognised this type of configuration and described it as a ‘differences focused approach.’ Second, compartmentalisation reflects keeping multiple identities in their own compartments within the self, separate from each other. These individuals identify with one cultural group at a time, activated by a particular context as a response to cultural cues (e.g., language, cultural symbols). This process is also called frame switching (Hong, Morris, Chiu, & Benet-Martinez, 2000). Finally, integration configuration is based on seeing a common ground between identities, while differences are perceived as complementary. An individual may develop a higher-order, superordinate inclusive identity that incorporates different cultural paradigms. In contrast to compartmentalisation, integrated individuals can identify with all cultures simultaneously. Although an increasing number of empirical studies on multicultural identities have emerged, there is little knowledge of how TCK organise their multiple cultural identities and what factors may contribute to how cultural parts are endorsed.

#### *Factors related to social and cultural identity*

A multicultural environment offers a wide array of social collectives to belong to as the possible basis for establishing the TCK’s social and cultural identities. Nevertheless, individuals choose some, ignore others. Undoubtedly, international experience is fundamental to TCK identity (Pollock et al., 2017). Another factor is language, which as a mother tongue, is an essential source of identity (Yildiz, 2012). Vivero and Jenkins (1999) highlighted that for multilingual kids, the idea of the primary language is based on a mixture of all languages that the child is exposed to, which create an original structure not shared by anyone else. Because language is used to transmit culture, Nguyen and Ahmadpanah (2014) also evidenced that the relationships between the native languages can mediate if a multicultural person will develop a blended and harmonious or compartmentalised identity. Hence, multilingualism can contribute to general confusion and decreased well-being of cross-cultural individuals, not letting them connect fully with any cultural world.

A global mindset is another factor that should be considered. Stokke (2013) suggested that the central aspect of the global mindset for cross-culturally exposed individuals was a “passion for diversity.” Cultural and cognitive aspects of a global mindset, namely high interest in other cultures, positive assessment of culturally different others, ability to perceive similarities between diversities, facilitate cultural learning and gaining knowledge, essential for the development of cultural identity. Simultaneously, a global mindset supports questioning of the categorical identity (Kubota, 2010). An internalisation of more than one cultural worldview (ethnorelativism) is forming an opposite frame of reference to ethnocentrism (Bennett, 2017). Therefore, a global mindset creates favourable conditions for the organisation of cultural identities in an integrated manner rather than categorical or compartmentalised. Similarly, a global mindset may contribute to social identity formation based on more inclusive social types, such as attributive and axiological.

While a global mindset highlights similarity among people of different origins and promotes abandonment of traditional boundaries, essentialism amplifies others’ perceptions based on substantial distinctions and perceives the between-group differences as fixed (Bastian & Haslam, 2006). Essentialism consists of beliefs that differences between people are grounded in underlying, identity-determining essences and that human attributes are deeply rooted, natural, discrete, and informative about people. The same view is about groups and social categories since people tend to essentialise categories such as race, nationality, and ethnicity (Bastian & Haslam, 2006; Williams & Eberhardt, 2008). An essentialist understanding of a group implies that group membership is immutable (Bastian & Haslam, 2007). Such a tendency to rely on a rigid categorisation process makes it more challenging to navigate cultural frames. Research shows that essentialism encourages stereotypes (Bastian & Haslam, 2006), justification for inequality, racial discrimination, and prejudice (Keller, 2005; Williams & Eberhardt, 2008). In contrast, less essentialist views about culture could allow cross-cultural individuals to move between different cultural systems and define themselves in dynamic, contextualised ways (Chao, Chen, Roisman, & Hong, 2007), promoting more inclusive and integrated social identities.

Lastly, social ties may also affect the formation of social and cultural identities of TCK. Having strong family ties, close friendships, relationships at school, or work helps individuals choose a social collective as a base for social identity. Also, as Wan and Chew (2013) suggest, social ties may support establishing cultural identity since they serve as a transmission agent of shared cultural knowledge. Additionally, the perception of social inclusiveness could be supportive of one’s coherent identity formation.

#### *Psychological well-being of TCKs*

There has been a long-established approach in literature associating cross-cultural identity and frequent geographical relocations with impoverished well-being (Hoersting & Jenkins, 2011; Schaetti, 1996). “Transculturalism” and identity “between”, as ascribed to the TCK’s self-concept, have been regarded as rather negative traits related to lowered levels of self-esteem (Hoersting & Jenkins, 2010), success (Burrus, 2006), and identity integration (Pollock et al., 2017; Vivero & Jenkins, 1999). Nevertheless, growing evidence in psychological research supports the opposite view of multiculturalism. For example, bicultural individuals who can form strong, positive multi-ethnic identities have higher self-esteem (Phinney, Cantu, & Kurtz, 1997), fewer mental health problems (LaFromboise, Coleman, & Gerton, 1993), and higher academic achievement (Fulgini, Witkow, & Garcia, 2005) than their peers with less developed identities. However, it is essential to emphasise that merely having more than one cultural identity may not be enough to benefit the



person. Studies show that multicultural individuals' well-being depends on how individuals configure their complex identities (Amiot, de la Sablonniere, Terry, & Smith, 2007; Carpentier & de la Sablonniere, 2013; Yampolsky & Amiot, 2013). The most consistent argument in the literature is that integration predicts well-being, while categorisation and compartmentalisation operate inconsistently (Yampolsky & Amiot, 2013). Another factor to consider is the we-concept introduced by Jarymowicz (2015). In this view, inclusive we-concepts, such as attributive and axiological, diminish the possibility of negative social attitudes toward others, which improve social relationships and contribute to an individual's well-being. The axiological identity seems especially important because its psychological foundation is a community among people across diverse cultures.

#### *Aims, research questions and hypotheses*

Although biculturalism has been previously studied (e.g., Cheng, Lee, Benet-Martinez, & Huynh, 2014; Benet-Martinez & Haritatos, 2005), there is a scarcity of quantitative research on identity structure and the psychological well-being of TCK individuals who usually have more complex cultural identity than biculturals. Within theoretical paradigms of social and cultural identities, the present study aimed at exploring the uniqueness of TCK females' cultural and social identity with multiple objectives.

Firstly, we aimed to explore the configurations and prevalence of specific forms of social and cultural identities. Assumptions based on Tajfel's SIT (1974) imply a higher frequency of categorical forms of social identity defined as a we-concept, though some authors (Jarymowicz, 2002; Nette & Hayden, 2007) suggest that other identifications might prevail. According to the SIT, configurations of multicultural identity such as categorisation and compartmentalisation might dominate over integration, but empirical evidence concerning bicultural individuals suggests otherwise (Yampolsky et al., 2016). Given inconclusive theoretical and empirical claims, the issue of configurations of social and cultural identities of TCK is posed here as an explorative research question:

**RQ1.** What are the configurations of TCK social and cultural identities and interrelations among them?

Secondly, we attempted to investigate the TCK characteristics, such as factors associated positively or negatively with cross-cultural individuals' social and cultural identity configurations. Based on the literature, we selected the following variables: number of countries where TCK lived, number of languages spoken, global mindset (Stokke, 2013; Kubota, 2010; Bennett, 2017), social inclusiveness (Wan & Chew, 2013), and essentialism (Bastian & Haslam, 2006, 2007; Williams & Eberhardt, 2008) as factors related to social and cultural identities. Thus, the following research question and set of hypotheses have been formulated:

**RQ2.** What are the relations between the number of countries where TCKs lived, the number of languages spoken and social and cultural identities configurations?

**H1a.** There are positive relationships between global mindset, attributive and axiological we-concepts, and integrated cultural identity.

**H1b.** There are positive relationships between essentialism, categorical we-concept, and cultural identity configurations: categorisation and compartmentalisation, but negative relationships between essentialism, attributive and axiological we-concept, and integrated cultural identity.

**H1c.** There are positive relationships between social inclusiveness, group and attributive we-concept, and integrated cultural identity.

Thirdly, we aimed to identify the potential predictors of life satisfaction of TCK. Research on social identity, defined in terms of we-concept, shows that more inclusive forms, such as we-attributive and we-axiological, promote more positive attitudes toward other people and more prosocial behaviours, resulting in higher satisfaction with life (Jarymowicz, 2002, 2015). There is empirical evidence that an integrated form of multicultural identity predicts the positive well-being of cross-cultural individuals (e.g. Yampolsky & Amiot, 2013). Also, global mindset, social inclusiveness, and essentialism would affect life satisfaction. Therefore, we propose the following hypothesis:

**H2.** Life satisfaction of TCK is associated positively with attributive and axiological we-concepts, an integrated configuration of cultural identity, global mindset and social inclusiveness, but negatively with essentialism.

#### **Method**

##### *Sample*

One hundred thirty-three TCK were recruited via purposive sampling, but due to inequivalence of gender, the male participants ( $n = 11$ ) have been removed from the analyses. The study comprised 122 females, undergraduate students of a British overseas university campus in Dubai, UAE, with a mean age of 20.6 years ( $SD = 3.6$ ; Range:18–43), coming from 18 countries, with a majority being South Asian - 77 individuals (60%), 20 Arabs (15%), 13 Europeans (9%) and others. All reported being influenced by on average two cultures ( $M = 2.2$ ;  $SD = 1.02$ ; Range 1–6), and they considered themselves TCK based on a given definition: *please check YES if you have been raised in a culture other than your parents (or culture of the country given on your passport) for a significant part (more than one year) of early years 6–18*. Fifty-one individuals (42%) reported being influenced by two cultures, 35 respondents (28%) by one culture, 23 respondents (19%) by three cultures, nine individuals (7%) by four cultures, three individuals (2%) by five cultures, one person (1%) by six cultures. Participants provided also information about length of stay in the multicultural environment of the United Arab

Emirates in years ( $M = 14.22$ ;  $SD = 6.5$ ;  $Mode = 18$ ;  $Range = 1–35$ ); number of countries outside passport country a person lived in for more than one year ( $M = 1.66$ ;  $SD = .83$ ;  $Mode = 1$ ;  $Range = 0–5$ ); and number of languages a person could speak fluently ( $M = 2.5$ ;  $SD = .97$ ;  $Mode = 2$ ;  $Range = 1–5$ ).

#### Procedure

Data was collected online via Google Forms and stopped due to the outburst of the COVID-19 pandemic, which could have confounded life satisfaction scores. Respondents were informed about the study objectives, non-paid voluntary participation, anonymity, confidentiality, and withdrawal rights.

#### Measures

##### Social identity – the we-concept measurement

The Questionnaire of Social Perception (Jarymowicz, 2002) was applied to establish types of we-concept based on identification with a group or a broader social collective. In response to the open question, “Who are the people you call we/us? Please, finish the following sentence: We are ...”, participants were asked to list five answers. These answers were scored, grouped, and analysed by the authors, and three indices were created.

Firstly, the answers were classified into categories such as family, friends, students, nation, religion, community, activity group, preferred values, etc., according to what type of “we” participants referred. Therefore, a number of nominal variables were created with values 0 and 1. Score 1 was assigned to an individual who mentioned a given type of “we” at least once or more times.

Secondly, the particular we-concepts were grouped together into the categories identified by Jarymowicz (2002). These were the following categories: (1) identification with small groups within which face-to-face contact was possible; e.g., family, friends; (2) identification with social categories, a membership to which was based on an explicit criterion, such as gender, ethnicity; face-to-face contacts were possible with some members only; (3) attributive identification, based on a more abstract criterion, such as shared interests, and (4) axiological identification, based on shared values. Again, four nominal variables (for each category) were created with values 0 and 1. The score 1 was assigned to an individual who mentioned at least once or more times a particular type of the we-concept which belonged to a given category.

Thirdly, we computed four weighted scores for each of four variables (group, category, attributive, axiological) according to the rank order in which a given type of “we” appeared in the string of “we”, assigned by a participant. The first position got 5 scores, the second – 4 scores, the third – 3 scores, the fourth – 2 scores, the last fifth position – 1 score. The zero score was for the type of we-concept not mentioned by a participant. The range values of each variable were from 0 (none of the given ‘we’ were indicated) to 15 (all 5 belonged to the same “we” type). For example, a person who answered: *Pakistani, young (people), a family, friends, and Muslim* got five scores for we-group (3 for family and 2 for friends), ten scores for we-category (5 for Pakistani, 4 for young people, 1 for Muslim), zero scores for we-attributive (no such an identification) and zero scores for we-axiological (no such an identification). Thus, in contrast to the two previous indicators, based on the frequency of occurrence, the weighted scores provide information to what degree a person’s social identity was loaded with a particular type of social identification. This computation was based on Bochner’s (1994) adaptation of originally constructed the Twenty Statements Test by Kuhn and McPartland (1954) with modification from self-attitudes to collective identity.

##### Cultural identity measurement

The Multicultural Identity Integration Scale (MULTIIS) by Yampolsky et al. (2016) assessed three different configurations of multicultural identities. The introduction to the MULTIIS includes a brief definition of cultural identity and cultural context to ensure that all participants consistently understand the questions. MULTIIS consists of three subscales: Categorisation (5 items,  $\alpha = .79$ ) with item sample: “I identify with one culture more than any other”, Compartmentalisation (9 items,  $\alpha = .75$ ) with item sample: “I identify with one of my cultures at a time”, and Integration (8 items,  $\alpha = .73$ ), item sample: “My cultural identities are connected”, all scored on 7-point Likert scale 1 (*not at all*) to 7 (*exactly*). We used the Confirmatory Factor Analysis (CFA) to assess the three-factorial structure of the MULTIIS. The CFA model provided acceptable fit to the data:  $\chi^2 = 274,41$ ;  $df = 192$ ;  $CMIN/df = 1,43$ ;  $RMSEA = .057$  [90 %CI = .041–.072];  $CFI = .901$ .

##### Social inclusiveness measurement

Four items related to social inclusiveness were adapted from the Social and Emotional Loneliness Scale for Adults (SELSA-Short) (Ditommaso & Spinner, 1993; Ditommaso, Brannen, & Best, 2004). Items were rated on a 7-point Likert-type scale that ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). Item sample was: “I feel part of a group of friends” ( $\alpha = .72$ ).

##### Global Mindset measurement

Global Mindset measurement was based on den Dekker (2011) Global Mindset Scale and consisted of four items scored on a 5-point Likert scale that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Item sample was: “I am a world citizen” ( $\alpha = .64$ ).

##### Satisfaction With Life Scale

The five-item Satisfaction With Life Scale (Diener, 1984) was used to measure individuals’ satisfaction with their lives, using a 7-point Likert-type scale that ranged from 1 (*strongly agree*) to 7 (*strongly disagree*). Item sample was: “I am satisfied with my life” ( $\alpha =$

.84).

#### Essentialism measurement

Essentialism was measured with an implementation of a question adapted from the Racial Essentialism Scale (Chao et al., 2007; see also No et al., 2008). This item reflected endorsement of the belief that race is characterised by unchangeable essence and that such essence determines the characteristic abilities/traits of racial group members. Item: “How a person is like (e.g., his or her abilities, traits) is deeply ingrained in his or her race. It cannot be changed much”. As in Chao et al. (2007), answers were scored on a 6-point Likert-type scale that ranged from 1 (*strongly disagree*) to 6 (*strongly agree*).

#### Analytical strategy

We applied qualitative and quantitative approaches to exploring the social and cultural identity of TCK. To assure the rigour of the content analysis (qualitative approach) of the we-concept question, the authors cross-checked their interpretational classification of the social identifications to allocate them to the groups based on Jarymowicz (2002). We used the we-concept weighted scores (quantitative approach) to describe the social identity configurations and perform other statistical procedures. We tested differences between the types of social identity (weighted scores of group, category, attributive and axiological identities) with the non-parametric Wilcoxon signed-rank test since two variables (attributive and axiological identities) had no normal distribution. Differences between configurations of cultural identity were tested with Student's *t*-test for related samples. We calculated correlation coefficients to assess relationships between forms of social identity and cultural identity configurations (Pearson's *r* and Kendall's tau) (RQ1). Analysis of correlations between study variables also provided information concerned RQ2 and H1a,b,c, on factors significant for social and cultural identity. To test H2, we performed linear regression analysis. For this analysis, two variables that violated normal distribution assumptions (attributive and axiological identity, based on weighted scores) were converted into nominal variables, where 0 indicated lack of a given type identity, and 1 – presence. All statistical analyses were performed using SPSS v.26.

## Results

### RQ1: what are the configurations of TCKs' social and cultural identities and interrelations among them?

Analysis of the social identifications revealed 16 types (Table 1.) further clustered into four we-concepts, presented based on frequency from most commonly mentioned to least (Table 2).

The analysis of social identity represented by weighted scores, revealed that social identities of participants were loaded most heavily with categorical identification ( $M = 7.0$ ,  $SD = 5.29$ ), followed by small groups identification ( $M = 4.55$ ,  $SD = 4.61$ ), then attributive ( $M = 1.14$ ,  $SD = 2.31$ ), and axiological ( $M = .98$ ,  $SD = 2.48$ ) (Table 3). The Wilcoxon signed-ranks test proved significant differences between we-categorical scores and we-small groups scores ( $z = -2.85$ ,  $p < .004$ ), we-attributive scores ( $z = -7.52$ ,  $p = .000$ ), and we-axiological scores ( $z = -7.34$ ,  $p = .000$ ); between we-small groups scores and we-attributive scores ( $z = -5.98$ ,  $p = .000$ ), and we-axiological scores ( $z = -7.34$ ,  $p < .001$ ), but no significant difference between we-attributive and we-axiological scores ( $z = -.97$ ,  $p = .333$ ).

The descriptive statistics for the configurations of multicultural identity have been presented in Table 3. The most highly scored configuration was integration, while compartmentalisation had the lowest scores. Pairwise comparison of the three scales revealed that the mean score for integration ( $M = 4.67$ ,  $SD = .87$ ) was significantly higher than the mean score for categorisation ( $M = 4.18$ ,  $SD = 1.36$ ),  $t(121) = 3.65$ ,  $p = .000$ , and significantly higher than the mean score for compartmentalisation ( $M = 3.67$ ,  $SD = .93$ ),  $t(121) = 8.02$ ,  $p = .000$ . Compartmentalization scores were significantly lower than categorization:  $t(121) = 4.58$ ,  $p = .000$ .

Correlation coefficients (Pearson's *r* and Kendall's tau) for weighted scores of social identity provided in the Table 3 showed

**Table 1**  
Types of Social Identifications (N = 122).

	Types	N (%)	Examples
1	Country of origin	67 (55 %)	Indians, British, Kenyans
2	Family	58 (48 %)	Family, immediate family, siblings
3	Friends	58 (48 %)	Friends, friend circle, peers
4	Activity	38 (31 %)	Parting people, book readers, beach lovers
5	Students	44 (36 %)	Students, psychology students
6	Religion	35 (29 %)	Muslims, Roman Catholics, Christians
7	Multiple countries	23 (19 %)	Lebanese-Canadians, Libyans-Canadians, Pakistani-British
8	Gender	22 (10 %)	Women, females, girls
9	Psychological traits	19 (16 %)	Introverts, extraverts, risk-takers
10	Community	13 (11 %)	The church community, the business community, hometown
11	Ethnicity	15 (12 %)	Arabs, Tamilians, Africans
12	Age/generation	10 (8%)	Millennials, young adults, teenagers
13	Continents	7 (6%)	Asians, Europeans, Latin Americans
14	Race	4 (3%)	White people, brown people
15	Sexual orientation	2 (1.6 %)	LGBT + people
16	Human beings	1 (0.8 %)	Humans

**Table 2**  
Types of We-concepts (N = 122).

	We-concept	N (%)	Examples
1	We-category	87 (71 %)	Students, gender, confession
2	We-small groups	67 (55 %)	Family, friends
3	We-attributive	47 (38 %)	Basketball players, book readers
4	We-axiological	10 (12 %)	Animal helpers, risk-takers

significant negative correlations between small groups and categorical identities ( $r = -.73, p = .000$ ), a significant negative correlation between categorical and attributive identities ( $\tau = -.16; p < .05$ ), also between categorical and axiological identities ( $\tau = -.16; p < .05$ ).

With respect to cultural identity, categorization was positively associated with compartmentalization ( $r = .47; p = .000$ ) and marginally with integration ( $r = .17; p < .10$ ), while association between compartmentalization and integration revealed the other direction, albeit of marginal significance ( $r = -.17; p < .10$ ). It is worth noticing that the correlation matrix did not reveal any significant correlations between social identity scores and cultural identity configurations.

#### RQ2, H1- a,b,c: factors related to the social and cultural identities of TCK

Regarding RQ2, results show that the number of languages spoken fluently was associated positively with integration ( $r = .32; p = .000$ ), as did the number of countries lived in ( $r = .26; p < .003$ ). Correlation coefficients presented in Table 3 showed that almost each of the proposed variables was connected to some configurations of identities. However, proposed hypotheses were confirmed only partly. A global mindset (H1a) was positively associated only with the axiological social identity ( $\tau = .15; p < .05$ ) and negatively with categorical social identity ( $r = -.16; p < .05$ ), though of marginal significance. Essentialism (H1b) correlated positively with categorization ( $r = .28; p < .01$ ) and compartmentalization ( $r = .20; p < .05$ ); negatively with an attributive social identity ( $\tau = -.17; p < .05$ ), and with axiological identity ( $\tau = -.16; p < .05$ ), as expected, but no relations showed to integrated cultural identity. Our expectations concerning social inclusiveness (H1c) were confirmed only in the case of positive relations with a group social identity ( $r = .21; p < .05$ ), but contrary to expectations, we found a tendency toward negative relations with categorical social identity ( $r = -.17; p < .10$ ).

#### H2: predictors of life satisfaction of TCKs

A hierarchical multiple regression analysis was performed (Cook's D values  $< 1$ ) to investigate the influence of the factors related to social and cultural identity on life satisfaction (Table 4). Possible predictors were grouped into three models: 1. Social identifications; 2. Cultural identity configurations; 3. Psychosocial factors (global mindset, social inclusiveness, and essentialism). Small groups, categorisation, attributive, and axiological social identifications were included in Model 1, which was not a good fit for data with none of the variables predicting life satisfaction. Compartmentalisation, integration, and categorisation have been added to Model 2. The model was a good fit for data, and predictors accounted for 8% of the variation in life satisfaction, with integration being the only significant and positive predictor of life satisfaction. Global mindset, essentialism, and social inclusiveness were added to Model 3. This model explained 15 % of the variance in life satisfaction. The model fit well the data, with integration, global mindset, and social inclusiveness significantly and positively predicting life satisfaction. None of the social identity types was included in the significant predictors set. Thus, the hypothesis was confirmed only partly.

## Discussion

#### RQ1: what are the predominant configurations of TCK' social and cultural identities and interrelations among them?

Our first research questions concerning social and cultural identities have been answered with evidence supporting the fact that TCK females' social identity is still primarily based on national categories. Previous studies demonstrated that the passport country seems to be an artificial factor in identity building for TCK and can be harmful to their well-being (Jordan, 1981). For children exposed to diversity, limiting their origin to one 'root' in the form of a passport country might be confusing, restricting, and feed into reverse culture shock experience (Gaw, 2000; Pollock et al., 2017; Szudlarek, 2010). Despite commonly identifying themselves with passport countries, most of the participants also included social identifications based on relationships, not geography, which extends previous results of Hayden (2012) and McLachlan (2007). The most commonly mentioned social identifications based on relationships were "we as a family" and "we as friends," which is in line with the thesis of Nette and Hayden's (2007) that friendship constitutes a central aspect of coherent identity development. There is, therefore, a tendency for women TCK to find alternatives to often irrelevant country categories in their social identity building. We conclude that friendships and small group belongingness could constitute an essential and facilitative factor for the identity of TCK.

Another key outcome of the present study was related to cultural identity configurations. Out of three configurations, TCK females most commonly demonstrated integration, supporting previous research (Yampolsky et al., 2016). It might suggest a general tendency among TCK towards the coherent configuration of diverse cultural selves. Some factors could, however, disturb such harmonious

**Table 3**  
Means, Standard Deviations, Skewness, and Intercorrelations of Variables.

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1 We-group	4.55											
2 We-categorical	7.00	.50										
3 We-attributive	1.14	2.31	2.73									
4 We-axiological	.93	2.46	3.12	3.12								
5 Categorization	4.18	1.36	.02	.02	.02							
6 Compartment	3.67	.93	-.13	-.05	.01	.01						
7 Integration	4.67	.87	-.41	.03	.06	.06	.04					
8 Global Mindset	3.61	.82	-.11	.01	-.16 <sup>†</sup>	-.17 <sup>†</sup>	.02	.14				
9 Essentialism	3.32	1.01	-.31	-.02	.10	.20 <sup>*</sup>	.23 <sup>**</sup>	.01	-.09			
10 Social Inclusiveness	4.03	1.60	.69	.25 <sup>*</sup>	-.18 <sup>*</sup>	-.02	-.04	-.14	.03	1		
11 Life Satisfaction	4.75	1.20	-.24	.03	.04	.01	-.02	-.15	.21 <sup>*</sup>	.09	24 <sup>**</sup>	
12 Languages	2.48	.97	.43	.11	-.04	.03	-.04	.12	.06	.11	.14	1
13 Countries Lived In	1.67	.84	1.39	-.13	.09	.07	-.03	-.07	-.05	.03	.15	.14

Note: We-attributive and We-axiological don't have a normal distribution (high skewness scores), so non-parametric Kendall's tau were computed between these and other variables in italics.

<sup>†</sup>  $p < .10$ .

\*  $p < .05$ .

\*\*  $p < .01$ .

**Table 4**  
Hierarchical Regression Analysis of Social Identifications, Cultural Configurations, Global Mindset, Social Inclusiveness and Essentialism on Life Satisfaction.

Predictors	Model 1			Model 2			Model 3		
	B	SE	Beta	B	SE	Beta	B	SE	Beta
We - group	.04	.04	.14	.02	.04	.08	.02	.04	.09
We - categorical	.04	.03	.14	.02	.03	.08	.03	.03	.15
We - attributive (0=No; 1=Yes)	.13	.25	.05	.03	.24	.01	.16	.24	.06
We - axiological (0=No; 1=Yes)	-.06	.27	-.02	.03	.26	.01	-.03	.25	-.01
Categorization				.01	.09	.01	.03	.09	.03
Compartmentalization				-.13	.13	-.10	-.17	.13	-.13
Integration				.44	.13	.32**	.35	.13	.26*
Global Mindset							.26	.13	.18*
Essentialism							.13	.11	.11
Social Inclusiveness							.15	.07	.20*
R sq (R sq Adj)	.01 (-.02)			.13 (.08)			.22 (.15)		
F	<1 (4; 117)			2.45 (7;114)*			3.09 (10;111)***		
Delta R sq	.01			.12**			.09**		

Note: \*p < .05; \*\* p < .01; \*\*\* p<.001.

preferences provoking deviation towards compartmentalisation or categorisation. Furthermore, correlational analyses revealed that compartmentalisation and categorisation were moderately associated pairwise. Integration was marginally related to categorisation and compartmentalisation. Similar relationships between factors have been presented by Yampolsky et al. (2016), suggesting that individuals might possess a certain level of each configuration, with one becoming salient due to personal characteristics and adjustment requirements.

Intriguingly, our results did not reveal a correlation between social and cultural identities. On one side, this might be due to the differences in employed measures, the more implicit "we" test versus questionnaire-based MULTIS. On the other hand, our findings suggest that these notions reflect distinct and independent yet complementary processes. Social and cultural identities might not be linearly related but may interact in their impact on well-being (Chang, Jetten, Cruwys, & Haslam, 2017). Identification with a social group defined in terms of shared categorization is portrayed in literature as different from cultural identity understood as shared abstract values and beliefs (Chang & Jetten, 2015). Berry (2001) referred to these two dimensions as civic identity and ethnic identity. Therefore, our findings may touch on the previously discussed idea that social identity theory (SIT) may contradict the theory of multicultural identity development (Negy, Shreve, Jensen, & Uddin, 2003; Phinney et al., 1997). While SIT states that strong ethnic identity will predict negative out-group biases (Tajfel), Berry (2001) within the cultural paradigm suggested that secure and robust ethnic (categorical) identity might lead to positive cross-cultural tendencies. Hence, some researchers propose that culture moderates the SIT theory (Hamamura, 2016), while others suggest expanding the SIT perspective by cultural orientation as an independent factor (Feitosa, Salazar, & Salas, 2012). Our findings could reflect these inconsistencies, but more research is needed.

*RQ2. What are the relations between a number of countries where TCK lived, the number of languages spoken and social and cultural identities configurations?*

We have further aimed to highlight the specific factors that might feed into variations of cultural and social identities based on the assumption proposed in the Integrative Model of Biculturalism (Cheng et al., 2014). According to Tsai, Ying, and Lee (2000), early migration experience can facilitate integration, primarily due to relationships between acquired early language competencies and cultural engagement. Our participants, on average, spoke at least two languages fluently, with a maximum of six and fluency in more than one language was correlated with integration which aligned with the literature (Russell, 2011; Pollock & Van Reken, 2017; Tarique & Weisbord, 2013). Hence, our findings confirm previous evidence that higher linguistic proficiency supports harmonious bicultural identity (Haritatos & Benet-Martinez, 2002; Tsai et al., 2000), extending these predictions to a multicultural context. Furthermore, the number of countries lived in was significantly associated with cultural identity integration. This finding connects with Den Dekker's (2011) claims that exposure to diversity is central to intercultural sensitivity and acceptance of diversity. Therefore, exposure to diversity and multiple language proficiency have shown to be predictors of intercultural competencies and facilitative to integration.

*H1a. There are positive relationships between global mindset, attributive and axiological we-concepts, and integrated cultural identity*

H1a hypothesis was partially confirmed as only axiological social identification was positively associated with a global mindset. These findings support Den Dekker's (2011) argument that the ideal form of a global mindset accepts diverse paradigms and takes values-based perspectives on identity. Contrary to our expectations, individuals who formed identity on shared values and had higher predispositions for a global mindset have not been more integrated in terms of cultural identity. The following hypothesis (H1b) explains that integration might be supported by the axiological we-concept in another way by its buffering role in compartmentalisation and categorisation.

*H1b. There are positive relationships between essentialism, categorial we-concept, and cultural identity configurations: categorisation and compartmentalisation, but negative relationships between essentialism, attributive and axiological we-concept, and integrated form of cultural identity*

H1b was partially confirmed as out of the above suggested social and cultural identifications, compartmentalisation and categorisations configurations were positively associated with essentialism, while axiological and attributive negatively. These relationships support the notion that essentialism is rooted in a fixed and categorical mindset. *Tajfel and Turner (1986)* proposed that categorisation increased essentialistic and ethnocentric tendencies, influenced attitudes, and took forms of stereotyping and prejudice. Such segregation in the case of TCK could lead to their cultural identity compartmentalisation. As categories-based social identification can lead to depersonalisation, influence conformism, and adherence to group ideals while decreasing personal identification (*Hornsey, 2008*), it is vital to search for buffering factors harmonising the social functioning of multicultural individuals.

Our results further highlighted that such buffers could be seen in values-based and interests-based social identifications. Essentialism was negatively associated with attributive identification, confirming *Hornsey's (2008)* theory that identifications based on shared interests and individual attributes could buffer categorisation tendencies. Hence, supporting idiosyncratic identifications could associate with less essentialist inclinations and possibly more acceptance towards various internal cultural paradigms. Additionally, axiological social identification was also negatively associated with essentialism. It could further extend *Hornsey's (2008)* idea that categorisation could be overridden by establishing a values-based, non-categorical identity, which would integrate different paradigms within oneself.

*H1c. There are positive relationships between social inclusiveness, small groups and attributive we-concepts, and integrated configuration of cultural identity*

Literature on TCK articulates that close interpersonal relationships are vital to their functioning and their social identity depends on the quality of such social interactions (*Wan and Chew, 2013*). In line with this notion, our findings confirmed H1c partially, revealing the positive association between small group social identification (family, friends) and social inclusiveness. According to *Hayden (2012)* and *McLachlan (2007)*, such identification might constitute an alternative to the categorical self-concept for multicultural individuals. On the same note, social inclusiveness for TCK correlated negatively with categorical identification, confirming the notion that the more an individual is embedded in direct interpersonal relationships, the less important it is to belong to a broad universal category in which direct relations with all members are not possible. Such findings are crucial to understanding the role family and friends play in forming an identity for multicultural individuals. Moreover, the lack of association between social inclusiveness and integrated cultural identity we interpret as a supportive argument on the theoretical duality of these two constructs: social identity is constructed based on real interpersonal relationships. Cultural identity is instead an abstract community of values, transmitted via interactions but relying on cultural media.

We conclude our findings related to the first set of hypotheses with a statement that integrated cultural identity relies on exposure to diversity, language competencies, axiological social identification and global mindset. These factors buffer categorisation and essentialism due to their connections with positive attitudes towards culturally different selves (*den Dekker, 2011*) and the ability to perceive similarities within diversity (*Gupta & Govindarajan, 2002*).

*H2: predictors of life satisfaction of TCK*

Hierarchical regression was performed to test H2, and results highlighted that life satisfaction could be predicted from an integrated multicultural identity, global mindset and social inclusiveness. Out of TCK's characteristics and identity variables, integrations seemed the most critical in predicting life satisfaction. Our results support *Yampolsky et al. (2016)* findings that a complex multicultural identity can flourish if all cultural selves are similarly accepted. Our outcome is also in line with *Cheng et al. (2014)*, who proposed that individual differences in how biculturals manage their identities psychologically have important implications for their functioning. Integration of multicultural paradigms within cross-cultural identity might relate to TCK's flexibility, adaptability, curiosity, and potency for a global mindset, positively predicting life satisfaction. On the other hand, the reviewed earlier issues related to well-being, namely emotional and social disturbances, might, in fact, be related to lack of integrity for multicultural individuals who either compartmentalise or categorise their complex identities (*Cockburn, 2002*).

Such findings might highlight the prominent position of a global mindset in multicultural discourse. The question about the potential for a global mindset among TCK individuals has been posed and explored by *Stokke (2013)*. Her research highlighted a higher latency for a global mindset among TCK, with them being also more likely to welcome change (*Stokke, 2013*). It is in line with other studies, as an early and more frequent exposure to different norms and values was correlated with a global mindset in the research of *Den Dekker (2011)* and with predispositions for a metacognitive cultural intelligence (*Tarique & Takeuchi, 2008*). Our study further suggested that a global mindset might support the well-being of TCK besides cross-cultural competencies.

Furthermore, social inclusiveness was vital to the life satisfaction of TCK. According to the stress-buffering hypothesis model, social support attenuates the effect of adverse events and decreases stress (*Cohen & Wills, 1985*). Integrated identity does not only support the right life choices and is related to life satisfaction (*Côté, 2002*) but also is connected to successful social bonding (*Beyers & Seiffge-Krenke, 2010*). The social relationships, a perceived 'fitting in', predicted whether bicultural identity would be integrated or oppositional (*Cheng et al., 2014*). Therefore, our findings that social inclusiveness predicts life satisfaction for TCK align with the literature, extending knowledge to the TCK discourse.

### Limitations and future directions

Some limitations must be considered when interpreting our results. The sample nature and size limit the generalizability of findings, yet obtaining a sample of adult TCK is exceptionally challenging (Tarique & Weisbord, 2013). As participants were from diverse origins with a prevalence of South Asians, the potential influence of their cultural backgrounds on the results cannot be excluded as culture influences self-perception. Another limitation is seen in the measurement of essentialism as a one-item measure. It might be that it did not capture the totality of the concept. The levels of internal consistency for the global mindset measure were relatively low, which poses another limitation. The global mindset is a novel concept, and we refer to Nunally and Burstein (1994), pointing to lower levels of alpha as acceptable for exploratory research. Still, more studies related to global mindset dimensionality are recommended. Lastly, the variance explained by our model was comparatively small; therefore, we recommend further extensions to our study exploring other possible factors that might be impacting the life satisfaction of TCK individuals. To address such limitations, we further recommend replicating our research to implement alternative designs, measures, and male samples, as acculturation processes influence males and females differently (Chavez & Rudolph, 2007).

### Conclusion

To conclude, the present research proposed an extensive exploratory analysis of the complex social and cultural identities of adult female Third Culture Kids. We have highlighted the importance of value-based (axiological) social identification and global mindset as possible buffers of essentialism and categorisation for TCK. Furthermore, this study confirmed previous predictions about the positive role of cultural identity integration in multicultural individuals' life satisfaction, extending from bicultural to multicultural context. Lastly, we have pointed to the significance of the global mindset and social inclusiveness for TCK females' life satisfaction. Hence, our findings highlighted new factors related to multicultural individuals' well-being, which serves knowledge building and constitutes a starting point for future research targeting facilitation of TCK's functioning. The global mindset, social inclusiveness and integration are dynamic concepts and can be stimulated via environmental inputs. Interventions targeting these variables could, hence, improve the well-being of TCK.

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### CRedit authorship contribution statement

**Magdalena Mosanya:** Conceptualization, Investigation, Methodology, Writing - original draft, Writing - review & editing. **Anna Kwiatkowska:** Data curation, Methodology, Supervision, Visualization, Validation, Writing - review & editing.

### Declaration of Competing Interest

The authors report no declarations of interest.

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## 6.2. Study 2 – Multicultural identity integration versus compartmentalisation as predictors of subjective well-being for Third Culture Kids: The mediational role of self-concept consistency and self-efficacy



Article

# Multicultural Identity Integration versus Compartmentalization as Predictors of Subjective Well-Being for Third Culture Kids: The Mediational Role of Self-Concept Consistency and Self-Efficacy

Magdalena Mosanya <sup>1,2</sup> and Anna Kwiatkowska <sup>1,\*</sup>

<sup>1</sup> Institute of Psychology, Polish Academy of Sciences, Jaracza 1, 00-378 Warsaw, Poland

<sup>2</sup> Psychology Department, Dubai Campus, Middlesex University London, Knowledge Park, Bldg. 16, Dubai P.O. Box 500697, United Arab Emirates

\* Correspondence: akwiatkowska@psych.pan.pl

**Abstract:** Globalization has resulted in an exponential increase in the number of Third Culture Kids (TCKs), defined as being raised in a culture other than that of their parents (or the passport country) and meaningfully interacting with different cultures. Inconsistencies regarding the effect of multicultural and transient experiences on well-being exist in the psychological literature. We aimed to reveal associations between multicultural identity configurations (integration, categorization, compartmentalization) and well-being with the mediating role of self-concept consistency and self-efficacy. Participants ( $n = 399$ ,  $M = 21.2$  years) were students at an international university in the United Arab Emirates. We used the Multicultural Identity Integration Scale, the Berne Questionnaire of Subjective Well-Being, the General Self-Efficacy Scale, and the Self-Consistency Subscale from the Self-Concept Scale. The findings suggest that not merely exposure to diversity but also internal integration versus identity compartmentalization moderate the well-being of TCKs. We explained such mechanisms via partial mediation of self-consistency and self-efficacy. Our study contributed to a better understanding of the TCKs' identity paradigm and pointed to multicultural identity integration as vital to TCKs' well-being via its effect on self-consistency and self-efficacy. Conversely, identity compartmentalization decreased well-being via a reduction in the sense of self-consistency.

**Keywords:** third culture kids; multicultural identity; well-being; self-consistency; self-efficacy



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## 1. Introduction

### 1.1. Background

Globalization processes have prompted a rise of global citizens, so-called Third Culture Kids (TCKs) or global nomads, who move around the world following their parents and experiencing migrations during developmental years [1,2]. The exposure to diverse cultural paradigms on a never-seen-before scale has impacted the traditional understanding of self-concept and identity development. Crucial deviations from standard models have provoked a new wave of research on culturally complex identities [3,4]. However, the topic concerning new identities and how individuals deal with internal cultural diversity has yet to be sufficiently explored. Although TCKs' cultural and social identities are generating more and more attention from researchers, there need to be more studies on the other aspects of TCKs' self-concept, i.e., the sense of self-consistency or self-efficacy. Furthermore, recent research pointed to multicultural identity configurations (understood as ways of dealing with internal cultural diversity) as predictors of well-being for TCKs [3]. However, the mechanism behind such an effect still needs to be explored. The present study aimed to fill this gap, proposing intermediary effects on self-consistency and self-efficacy.

## 1.2. Literature Review

### 1.2.1. Third Culture Kids

Third culture kids (TCKs) are defined as raised in a culture other than that of their parents (or the culture of the country given on their passport) for a significant part of their early developmental years [1]. TCKs spend developmental years living overseas, meaningfully interacting with two or more cultural environments, which significantly influences their sense of identity shaped during adolescence [1,2]. TCKs further blend different cultural frames within themselves and might have the adaptability to feel at home everywhere, treating the world as a “global village”. Multicultural exposure has, therefore, multiple advantages. TCKs are recognized for their multilingualism, global leadership skills, global mindset, and intercultural sensitivity [2,5,6]. TCK individuals increasingly identify themselves as a separate group with a shared identity [2,7] and create organizations (e.g., Mu Kappa) to promote complex identities and provide support to people with multicultural and “nomadic” experiences. Alternatively, TCKs exposed to multiple cultural paradigms may experience difficulty finding groups to which they feel a sense of belonging [1,5,8,9]. TCKs need to negotiate their identities in early developmental years [10], which might jeopardize consistent identity formation and provoke fragmentation.

Due to accelerated economic growth, the United Arab Emirates, a Gulf country and hub for international business, brought together many expatriate workers to settle within its borders. As a result, the social environment of the UAE is truly multicultural. Furthermore, within the country, diversity and integration rather than assimilation are promoted. As young citizens can be predominantly characterized as TCKs [11,12], the UAE constitute an exciting center for well-being-related TCKs research.

### 1.2.2. Self-Concept and Identity Forms

Within the identity literature, the term self (self-concept) is applied in reference to a mental representation of oneself (e.g., [13–17]). Self-concept reflects self-schema, “a collection of at least semi-related and highly domain-specific knowledge structures” (p. 182, [18]). The function of the self-concept is to configure the information and regulate intentional behavior [19]. Hence, the self-concept can be understood as essential knowledge about the individual as part of a specific cultural/social environment (e.g., the self-concept constructed in one setting would be different from the self-concept created in another).

Furthermore, there is no consensus on whether self and identity are distinct or overlapping concepts. Some psychologists use these terms interchangeably [15], while for others, these words have differentiated meanings [20]. In this paper, to avoid possible confusion, we focused on identity understood as a part of the self-concept, i.e., as a specific subset of self-construals (forms of identity) which are relatively central as opposed to peripheral, essential as opposed to marginal, and substantial as opposed to nonmaterial [21,22]. The self-concept content may include all possible characteristics of a person or a group, but only some may be attributed to personal or social identity.

Identity is understood as a subjectively experienced concept of oneself as a person [23]. The identity process theory (IPT) [23–25] has brought a novel, dynamic perspective on self-construction, highlighting the socio-psychological processes underlying identity creation. Such a viewpoint encompasses a constructivist paradigm, within which identity is characterized as a multifaceted notion that continuously undergoes transformations based on interactions with changing contexts. Therefore, identity may take fluid and flexible forms. Such an approach seems particularly relevant when discussing new paradigms of TCKs and their identities.

Vignoles [25] further explained that identity indicates an answer to the question: *Who am I?* This question may appear in two forms: *Who am I as an individual?*, and *Who am I as a social being?* Thus, identity may be defined at two levels: individual and social (in line with the social identity theory (SIT)) [26]. Consequently, *individual or personal identity* refers to personal differences and attributes. *Social or collective (including cultural) identity* refers to identification with groups and social categories. *Cultural identity* is derived from

membership and self-identification with a cultural group [26]. A cultural group may consist of people of common ancestry (e.g., an ethnic identity, [27]) and people sharing common values and practices. Such a view on *cultural identity* goes beyond nationality or ethnicity [28]. According to Vignoles [25], a characteristic becomes part of identity only if it is infused with a personal and social meaning. Hence, the identity reflects the most salient aspects of one's self-concept, which is culturally shaped.

### 1.2.3. Cultural Context and Identity

The adaptive function of culture is seen as a customary way of acting, feeling, and thinking chosen by society from an infinite number and variety of possible ways of being. Cultural systems incentivize individuals to function in a specific frame. This particular frame influences how people see themselves in relation to others, so-called self-construals defined as different patterns in how the "self" is constructed (dependent vs. independent) [29]. Identity construction occurs through the acquisition of specific properties by self-construals based on an ongoing complex interplay of cognitive, affective, and social interaction processes [23,24]. Vignoles et al. [30] explored the conceptualization and measurement of traditional views on self-construals and proposed to see the constructs of selfhood as multidimensional, with different ways of being independent and interdependent. According to Vignoles [31], people are motivated to construct identities that allow them (among others) to have a feeling of being the same over time and across situations despite significant life changes (the consistency) and to feel competent and capable of influencing their environment (the efficacy). A sense of consistency, a sameness across situations, is experienced diversely across cultures [24]. Similarly, though a universal construct, self-efficacy is impacted by enculturation processes and originates from social and cultural practices. So, for multicultural TCKs, these two dimensions of self-concept would also have a specific presentation and function. Importantly self-concept dimensions have widespread implications for people's psychological and social experiences. At the individual level, they have been seen as predictors of cognition and motivation [32,33] and mediators in the effect culture has on emotions and cognitive processes [34,35].

### 1.2.4. Self-Consistency, Self-Efficacy and TCKs

Some dimensions of self-concept might be more crucial to third-culture individuals due to TCKs' specific, transient life experiences. The exposure to different cultural contexts combined with high mobility and frequent transitions from place to place may threaten TCKs' sense of consistency, understood as being the same in time and across situations. Furthermore, being an object of decisions made by somebody else (parents, institutions) concerning where to live, or study, may diminish one's sense of agency and frustrate self-efficacy. Hence, the self-concept-related dimensions of self-consistency and self-efficacy may have an ambivalent presentation for TCKs, discussed below.

Self-concept consistency or self-consistency is considered a defining feature of identity [10,36] and indicates one's perceived consistency (sameness) across situations and time [25,30]. In his developmental model, Erikson [10] pointed to the adolescent years as essential for developing identity clarity versus confusion. Erikson further highlighted that identity coherence and unity were based on solid connections to precise socio-cultural paradigms, values, and beliefs. These might be jeopardized in the case of third-culture individuals. Furthermore, studies suggest a close and dynamic relationship between the continuity and consistency of the narration of culturally significant memories and identity development [37]. The defining feature of TCKs' lives is high mobility [1]. Children and young people who follow their parents overseas, experience an endless pattern of relocations and changes. These may break TCKs' developmental trajectories by setting new goals to achieve, new values to respect, and new rules to follow. Hence, TCKs may experience incoherence across situations and the unpredictability of the future [38]. Furthermore, TCKs' temporary and situational fragmentation might constitute an issue for functioning and self-evaluation [37].

Self-efficacy appears to be significant to identity and the general functioning of multicultural individuals, though its role might be intermediary [23]. An individual's sense of self-efficacy determines whether one sets goals and acts on them. Bandura [39] theorized that self-efficacy is a context-specific judgment about one's ability. In a cross-cultural context, Hoersting and Jenkins [8] evidenced that self-efficacy was buffering a negative impact of recurrent relocations on TCK adolescents' coping and adjustment. Intercultural competency further increases bicultural individuals' functioning [40]. For TCKs, self-efficacy might be, on one side, impaired due to a lack of control over multiple relocations and inevitable change. On the other hand, self-efficacy might be enhanced due to TCKs' vast cross-cultural competencies, including a global mindset [2].

### 1.2.5. Multicultural Identity Configurations

Exposure to cultural diversity constitutes a challenge to the psychosocial development of TCKs, particularly to establishing a secure and coherent cultural identity. In cultural identity construction, TCK individuals may experience conflicting demands and expectations from different cultural groups encountered in their mobile lives, resulting in difficulties in achieving a coherent cultural identity. Consequently, for third culture kids, the discourse on multiculturalism is shifting from external influence, i.e., acculturation, to the internal fusion/hybridization of their cultural selves. Hybrid identities are fluid and transformative and do not fall into traditional cultural categories [41].

To encompass cultural pluralism, multicultural individuals ought to engage in specific strategies facilitating their identity building. The cognitive-developmental model of social identity integration (CDSMI) [42] accounts for the different ways that multiculturals cognitively configure their many cultural identities within their overall identity. Research has identified three types of identity configurations: categorization, compartmentalization, and integration [4,42,43]. The categorization configuration implies identifying with one cultural group, seeing one identity as predominant, and excluding other identities from the self. When endorsing categorization, differences between a chosen group and other groups are likely to be salient [43]. In contrast, the compartmentalization configuration allows an individual to endorse multiple identities, but they are kept separate from each other. These identities are context-dependent and activated depending on the social context. Although an individual may identify with many cultures, identities based on these cultures are not linked to one another within the self [43]. The third configuration—integration—occurs when individuals feel that they endorse belonging to different cultural groups. Thus, multiple identities are organized within the self to be equally essential and form one coherent supra-identity. The differences are seen as complementary and enriching to oneself. Integration may enable individuals to establish context-independent superordinate identity encompassing multiple influences [4] that cannot be reduced to the sum of its constituent identities [43,44]. The integrated multicultural identity has been linked to a global mindset in Mosanya and Kwiatkowska's [3] study, suggesting it may involve cosmopolitan and supra-cultural aspects reflecting the hybridization of identity [45]. The following quote from an interview with TCK supports such thesis *"I am a global citizen (...) I have an identity just not the national one"* (p. 23, [38]).

Aspects of self-concept and cultural identity are certainly reciprocally connected, though existing research has focused mainly on ethnic or national identity, possibly as a proxy for cultural identity [27,46,47]. The present study focuses on the relationship between multicultural identity configurations and self-concept dimensions of self-consistency and self-efficacy vulnerable for TCKs, based on the following premises. Osborne and de la Sablonniere [47] concluded that the clarity and consistency of cultural identity determine the clarity of self-concept and, consequently, well-being. The divergent selves with contradictory meanings proved challenging to identity integrity, causing stress and a loss of self-efficacy, and impaired well-being. Achieving an optimal sense of consistent and efficacious identity is also possible for TCKs through another mechanism, namely by identification with other TCKs. Identification as TCKs reflective of integrated identity

configuration could fulfil the motive for consistency via attributions of the consistent TCK experience of transience and mobility. Some evidence can be found in qualitative research where individuals self-refer as TCKs, e.g., “me as ti-si-kayz” and “my TCK tribe” [7].

### 1.2.6. Well-Being and TCKs’ Identity

One of the most significant life aims is subjectively experienced well-being (SWB), a primary interest of positive psychology, explained as a study on human flourishing. SWB is defined as a person’s cognitive and affective evaluations of life, a combination of feeling good and functioning well [48]. SWB is a multidimensional notion understood in various ways, e.g., as life satisfaction, positive affect, optimal functioning or happiness [49], sense of control over one’s life [50], and a blend of psychological positivity, physiological health and ill-being [51,52]. Life satisfaction can further be explained as a state of achievement linked to positive affect and the ability to deal with life circumstances [23,53]. Life satisfaction has been a predictor of individual and societal welfare [54].

Previously, studies concerning multicultural individuals have claimed that frequent geographical relocations had a long-lasting negative effect on self-concept clarity and general functioning [8,55]. In particular, the mental health of TCKs was seen as fragile and requiring support. A recent study conducted in the UAE on a sample of TCKs evidenced that nearly 30% reported moderate to severe depressive symptoms [11]. However, alternative research points to the cultural identity configurations as significant factors in multicultural individuals’ well-being, with integration identified as the positive predictor of life satisfaction [3]. A coherent self-concept, formed based on the integration of diverse cultural paradigms, has been linked to better mental health and higher self-esteem [27], both predictors of well-being. Moreover, a sense of self-consistency and self-efficacy are associated with positive emotions and enhanced well-being, whereas if frustrated, these dimensions of self may be related to ill-being [23,56]. Furthermore, the narrative continuity of identity and internal integrity relate to positive affect and well-being [23,56]. Likewise, a sense of self-efficacy for individuals with multiple cultural selves facilitates the socio-cultural adaptation process and supports well-being [57].

### 1.3. Aims and Hypotheses

In a novel way, the present study linked the established theories of multicultural identity configurations [4,42] with self-consistency and self-efficacy with multifold objectives [8,10,30,58]. Firstly, we explored whether significant relationships exist between configurations of cultural identity (integration, categorization, compartmentalization) and a sense of self-consistency, self-efficacy and well-being [3]. We further investigated if there were intermediary effects among multicultural identity configurations in their predictive effects on well-being with self-consistency and self-efficacy in the role of mediators. Figure 1 provides a visualization of the following hypotheses:

**H1.** *Multicultural identity integration positively predicts well-being (H1a), and such a relationship is mediated by increased self-consistency (H1b, c) and self-efficacy (H1d, e);*

**H2.** *Multicultural identity compartmentalization negatively predicts well-being (H2a), and such an effect is mediated by compartmentalization’s negative effect on self-consistency (H2b, c) and self-efficacy (H2d, e);*

**H3.** *Multicultural identity categorization negatively predicts well-being (H3a), and such an effect is mediated by the level of self-consistency (H3b, c) and self-efficacy (H3d, e).*

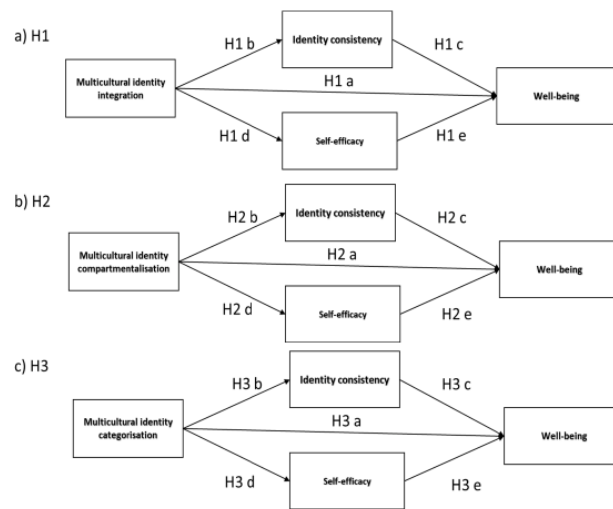


Figure 1. Hypothesized mediation effects of self-consistency and self-efficacy in a predictive impact of multicultural identity configurations (a) integration (H1), (b) compartmentalization (H2), (c) categorization (H3) on well-being (straight line—direct effects; dashed line—mediating effect).

## 2. Materials and Methods

### 2.1. Participants

The sample ( $n = 399$ ) consisted of 296 females (74%) and 103 males (26%) with a mean age of 21.2 ( $SD = 3.5$ , Mode = 19, Range 18–43). Third culture individuals were considered for this study after they checked “yes” for the given definition: *Check YES if you have been raised in a culture other than that of your parents (or the culture of the country given on your passport) for a significant part (more than one year) of early developmental years 6–18* [1]. All participants were students at an international university in the UAE. Participants were from non-Western countries currently residing in the UAE, with 205 (51%) being Indian passport holders, followed by Pakistani 20 (5%), Arabs 20 (5%), Filipinos 18 (4.5%), and others. They reported being influenced by between 3–7 cultures ( $M = 3$ ;  $SD = 3.5$ ; Mode = 3); Most of them spoke, on average, three languages (Mode = 3, Range 1–6). Their religions were Muslims 40%, Hindu/Buddhist 22%, Christians 21%, atheists 8%, and others. All participants were fluent in English, a requirement for university admission.

### 2.2. Materials

All questionnaires were administered in English in their original versions, which are universally accessible.

Sense of self-concept consistency was measured with the Self-Consistency Subscale (6 items,  $\alpha = 0.80$ ) from Vignoles et al. [30] consisting of the Self-Construal Scale, rated on a 7-point Likert scale of 1 (not at all) to 7 (exactly). Item sample: “*You behave the same way at home and in public*”. SCS has demonstrated reliability in cross-cultural studies [30].

Sense of self-efficacy was assessed with the General Self-Efficacy Scale [59] by incorporating ratings on a 7-point Likert scale of 1 (not at all) to 7 (exactly). It was a 10-item questionnaire ( $\alpha = 0.88$ ) with an item sample: “*I can always manage to solve difficult problems if I try hard enough*.” The GSES has shown reliability in past studies on predictors of life satisfaction with students of non-Western origin (e.g., [60]).

The configurations of multicultural identities were determined by the Multicultural Identity Integration Scale (MULTIIS; [4]). It consisted of 22 items scored on a 7-point Likert



scale of 1 (not at all) to 7 (exactly). MULTIIS contained three subscales: categorization (5 items,  $\alpha = 0.75$ ), item sample: “One of my cultures is more relevant in defining who I am than the others.”; compartmentalization (9 items,  $\alpha = 0.80$ ), item sample: “I identify with one of my cultures at a time.”; and integration (8 items,  $\alpha = 0.82$ ), item sample: “I have an identity that includes all my different cultural identities”. Confirmatory Factor Analysis (CFA) was performed to assess the three-factor structure of the MULTIIS. The CFA model provided acceptable fit to the data:  $\chi^2 = 398.41$ ;  $df = 196$ ;  $CMIN/df = 2.03$ ;  $RMSEA = 0.051$  [90% CI = 0.044–0.060];  $CFI = 0.924$ . The MULTIIS scale has been employed in an exploratory study on female TCKs [3] and has shown a three-factor structure and reliability of subscales.

The Berne Questionnaire of Subjective Well-Being [61] measured subjective well-being. The scale included 39 items, rated on a 7-point Likert scale of 1 (not at all) to 7 (exactly). Item samples: life satisfaction: “I am content with the way my life plans are being realised”, and ill-being (R) “I find my life uninteresting”. We have used the total score of life satisfaction and reversed ill-being items ( $\alpha = 0.91$ ). The scale showed reliability in the cross-cultural assessment of adolescents [52].

### 2.3. Procedure

The study was not preregistered. Data were collected online. To assure anonymity and data confidentiality, the link to the study was posted on groups and platforms for international students in the UAE. Respondents consented to participation after being informed about the study objectives, non-paid participation, anonymity, confidentiality, and withdrawal rights. The contribution was voluntary, and participants were given an email to the researchers and asked to insert their initials only. Any communication should have mentioned this if they wished to withdraw from the study. The data were encrypted for safe storage.

### 2.4. Analytical Approach

It was a questionnaire-based and cross-sectional study. We employed Pearson’s correlation coefficient and the hierarchical multiple regression analysis. The mediation analyses were performed using Model 4 of PROCESS Macro [62]. We proposed a complex model; hence a parallel mediation, which included more than one mediator, was deemed most appropriate [62].

## 3. Results

### 3.1. Correlational Analyses

All variables were normally distributed with skewness coefficients and kurtosis between +1 and −1. Descriptive statistics of all scales are presented in Table 1. Pearson’s correlation coefficient analyses (Table 1) revealed significant associations between variables pairwise. Self-consistency was positively associated with integration and categorization. Self-efficacy was related positively only to integration while negatively to compartmentalization. Well-being was positively significantly associated with self-consistency and self-efficacy and multicultural identity integration but negatively with compartmentalization. There was no association between categorization and well-being.

Table 1. Descriptive statistics and pairwise correlations.

Variables ( $n = 399$ )	$M$ ( $SD$ )	1	2	3	4	5	6
1. Self-consistency	3.88 (1.25)	-					
2. Self-efficacy	5.00 (0.98)	<b>0.16 *</b>	-				
3. Integration	4.91 (1.02)	<b>0.11 *</b>	<b>0.31 **</b>	-			
4. Categorization	4.19 (1.34)	<b>0.16 *</b>	−0.07	−0.17 **	-		
5. Compartmentalization	3.88 (1.09)	−0.10 *	−0.08	0.05	<b>0.48 **</b>	-	
6. Well-being	4.48 (0.74)	<b>0.23 **</b>	<b>0.48 **</b>	<b>0.22 **</b>	−0.07	−0.29 **	-

Note: \*  $p < 0.05$ ; \*\*  $p < 0.001$ . Significant correlations are presented in bold.

### 3.2. Hypotheses Verification

#### 3.2.1. Direct Effects

A hierarchical multiple regression analysis was performed (Cook's D values < 1) to investigate the influence of the factors related to social and cultural identity on well-being (Table 2). The predictors were grouped into two models: 1. Multicultural identity configurations; 2: Self-consistency and self-efficacy. Model 1 was a good fit for data ( $p < 0.005$ ) and explained 12% of the variance in well-being with integration and compartmentalization as significant predictors. Model 2 was a better fit for the data. All predictors accounted for 41% of the variation in well-being, with integration, self-consistency, and self-efficacy being positive and compartmentalization being a negative predictor of well-being. Post-hoc power analysis for five predictors revealed a good power of detecting an effect (power = 0.99;  $n = 399$ ;  $R^2 = 0.41$ ;  $p = 0.05$ ).

**Table 2.** Hierarchical regression analysis of multicultural identity configurations, self-consistency and self-efficacy on well-being.

Predictors	Model 1			Model 2		
	B	SE	Beta	B	SE	Beta
Integration	0.25	0.04	<b>0.28 **</b>	0.09	0.04	<b>0.11 *</b>
Compartmentalization	−0.20	0.04	<b>−0.23 **</b>	−0.12	0.03	<b>−0.14 **</b>
Categorization	0.02	0.03	−0.07	−0.03	0.03	−0.07
Self-consistency				0.15	0.03	<b>0.18 **</b>
Self-efficacy				0.56	0.04	<b>0.52 **</b>
R sq (R sq Adj)		0.35 (0.11)			0.65 (0.41)	
F		<b>18.00 (3; 395) **</b>			<b>36.98 (5; 393) **</b>	
Delta R sq		<b>0.12 **</b>			<b>0.30 **</b>	

Note: \*\*  $p < 0.001$ , \*  $p < 0.05$ . Significant effects are presented in bold.

#### 3.2.2. Mediation Analyses

After confirming the existence of pairwise correlations between variables and direct effects for integration and compartmentalization on well-being, the mediation models were evaluated with path c indicating the direct effect of IV on DV and path c' representing effects with mediators included in the model. Paths a, b, c, and d show the necessary assumption for the mediation model.

##### Hypothesis 1 (a, b, c, d, e)

A parallel mediation model analysis was used to investigate hypotheses that self-consistency and self-efficacy mediate the positive effect of integration on well-being (Figure 2). Results indicated a positive and significant total effect of integration on well-being supporting H1a. Integration was a significant predictor of self-consistency,  $\beta = 0.14$ ,  $SE = 0.06$ , 95%CI [0.01, 0.26],  $p = 0.02$ , and that self-consistency was a significant predictor of well-being,  $\beta = 0.17$ ,  $SE = 0.03$ , 95%CI [0.08, 0.21],  $p < 0.001$ . Furthermore, integration was a significant predictor of self-efficacy,  $\beta = 0.30$ ,  $SE = 0.04$ , 95%CI [0.20, 0.39],  $p < 0.001$ , and that self-efficacy was a significant predictor of well-being,  $\beta = 0.54$ ,  $SE = 0.03$ , 95%CI [0.46, 0.64],  $p < 0.001$ . After including mediators in the model, integration's effect on well-being lessened, suggesting a partial mediation  $c = \beta = 0.35$ ,  $SE = 0.04$ , 95%CI [0.26, 0.45],  $p < 0.001$ ;  $c' = \beta = 0.17$ ,  $SE = 0.04$ , 95%CI [0.09, 0.25],  $p = 0.001$ . The indirect effect was tested using a percentile bootstrap estimation approach with 5000 samples, implemented with the PROCESS Macro. These results indicated that the indirect coefficients were significant for self-consistency ( $B = 0.02$ ,  $SE = 0.01$ , 95%CI [0.04, 0.70], standardized  $\beta = 0.02$ ), and for self-efficacy ( $B = 0.16$ ,  $SE = 0.03$ , 95%CI [0.09, 0.23], standardized  $\beta = 0.16$ ). Integration was associated with well-being scores that were approximately 0.02 points higher as mediated by self-consistency, and 0.16 points higher as mediated by self-efficacy.

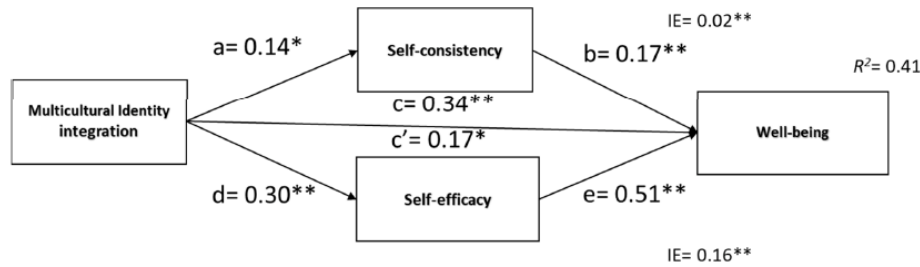


Figure 2. Mediation model of indirect effects of self-consistency and self-efficacy in the predictive effect of multicultural identity integration on well-being. Note: \*\*  $p < 0.001$ , \*  $p < 0.05$ .

Hypothesis 2 (a, b, c, d, e)

Figure 3 presents results indicating a negative and significant total effect of compartmentalization on well-being supporting H2a. Compartmentalization was a significant negative predictor of self-consistency ( $\beta = -0.10$ ,  $SE = 0.06$ , 95%CI  $[-0.20, -0.05]$ ,  $p = 0.03$ ) and self-consistency was a significant predictor of well-being,  $\beta = 0.17$ ,  $SE = 0.03$ , 95%CI  $[0.08, 0.21]$ . However, compartmentalization was not a significant predictor of self-efficacy ( $\beta = -0.07$ ,  $SE = 0.04$ , 95%CI  $[-0.13, 0.02]$ ,  $p = 0.15$ ), removing the possibility of its mediating effect. After including mediators in the model, the compartmentalization effect on well-being lessened, suggesting a partial mediation  $c = \beta = -0.20$ ,  $SE = 0.04$ , 95%CI  $[-0.26, -0.09]$ ,  $p < 0.001$ ;  $c' = \beta = -0.14$ ,  $SE = 0.04$ , 95%CI  $[-0.19, -0.06]$ ,  $p = 0.001$ . The indirect effect was tested using a percentile bootstrap estimation approach with 5000 samples, implemented with the PROCESS Macro. These results indicated that the indirect coefficients were significant for self-consistency ( $B = 0.02$ ,  $SE = 0.01$ , 95%CI  $[-0.04, -0.01]$ , standardized  $\beta = -0.02$ ) but not for self-efficacy ( $B = 0.03$ ,  $SE = 0.03$ , 95%CI  $[-0.09, 0.01]$ , standardized  $\beta = 0.16$ ). Compartmentalization was associated with well-being scores that were approximately 0.02 points lower as mediated by self-consistency.

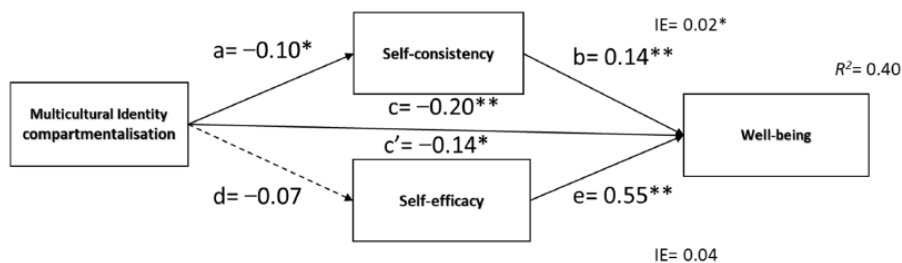


Figure 3. Mediation model of indirect effects of self-consistency and self-efficacy in the predictive effect of multicultural identity compartmentalization on well-being. Note: \*\*  $p < 0.001$ , \*  $p < 0.05$ .

Hypothesis 3 (a, b, c, d, e)

Figure 4 presents the results of the third mediation model, indicating no total effect of categorization on well-being rejecting H3a. Categorization was a significant negative predictor of self-consistency ( $\beta = 0.16$ ,  $SE = 0.04$ , 95%CI  $[0.06, 0.22]$ ,  $p < 0.01$ ), and self-consistency was a significant predictor of well-being,  $\beta = 0.20$ ,  $SE = 0.03$ , 95%CI  $[0.10, 0.24]$ ,  $p < 0.01$ . However, categorization was not a significant predictor of self-efficacy ( $\beta = -0.01$ ,  $SE = 0.03$ , 95%CI  $[-0.07, 0.05]$ ,  $p = 0.86$ ), removing the possibility of its mediating effect. After including mediators in the model, the compartmentalization effect on well-being increased and became significant  $c = \beta = -0.05$ ,  $SE = 0.03$ , 95%CI  $[-0.12, -0.01]$ ,  $p < 0.001$ ;

$c' = \beta = -0.10$ ,  $SE = 0.04$ ,  $95\%CI [-0.13, -0.01]$ ,  $p = 0.001$ . The indirect effect was tested using a percentile bootstrap estimation approach with 5000 samples, implemented with the PROCESS Macro. These results indicated that the indirect coefficients were significant for self-consistency ( $B = 0.02$ ,  $SE = 0.01$ ,  $95\%CI [0.01, 0.06]$ , standardized  $\beta = 0.03$ ) but not for self-efficacy ( $B = -0.01$ ,  $SE = 0.03$ ,  $95\%CI [-0.06, 0.04]$ , standardized  $\beta = -0.01$ ). It might be inferred that for categorization, the total effect on well-being was insignificant, but the direct was significant and negative. Such a situation is implied when opposite effects result from the independent variable. In the present model, categorization, on one side, enhanced internal consistency but, on the other, decreased well-being via different mechanisms. The hypothesis that it might be via a decrease in self-efficacy was rejected.

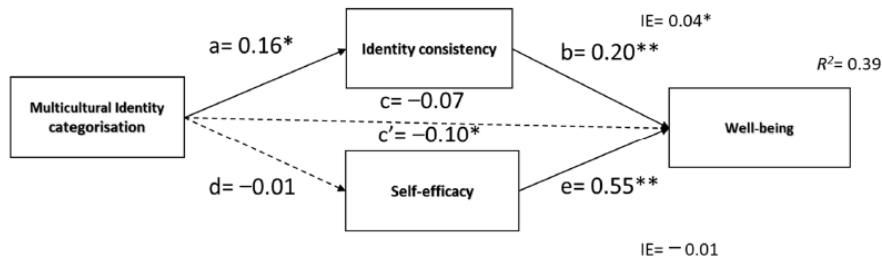


Figure 4. Mediation model of indirect effects of self-consistency and self-efficacy in the predictive effect of multicultural identity categorization on well-being. Note:  $^{**} p < 0.001$ ,  $^* p < 0.05$ .

4. Discussion

4.1. Associations between Multicultural Identity Configurations, Self-Consistency, Self-Efficacy, and Well-Being

The correlational analyses identified some significant pairwise associations between multicultural identity configurations, self-concept consistency and efficacy, and well-being. Hence, the present study has expanded existing knowledge linking cultural identity with self-concept (i.e., [47,63]) by including a more complex multicultural identity paradigm (reflective of social changes in the global era). However, not all variables were significantly associated. Possible reasons are discussed in the following sections.

Out of multicultural identity configurations, the strongest positive correlation was found between integration and self-efficacy. Integration was also a positive correlate of self-consistency. It supported previous suggestions that accepting all cultural paradigms within oneself can help boost competencies, leading to better adjustment [64,65]. Our findings also extend the prior assumption of self-efficacy acting as a buffer to experienced cultural homelessness and complexity while supporting integration [8], because both variables were also positively associated with well-being. Our data further evidenced that multicultural identity categorization was positively associated with self-consistency but not self-efficacy. It might be that essentialist and categorical strategies, which are the bases of identity categorization [3], increase motivation for a sense of self-concept consistency for individuals navigating different cultural frames. However, in contrast to integration, categorization implies the suppression of parts of oneself to achieve internal consistency. Categorization and compartmentalization of multicultural identity may lead to self-discriminant attitudes similar to categorical attitudes towards culturally diverse "others", causing discriminative behaviors towards them [66]. Self-discriminant processes, in turn, reduce TCKs' cross-cultural abilities and hence impair their self-efficacy. For our sample, the associations between categorization and compartmentalization with self-efficacy were negative but at borderline significance. For TCKs in the UAE, both exclusive configurations might not seem relevant to their efficacy. It might be related to the country's integrative and inclusive efforts and policies. However, more studies are needed to expand

upon this. Importantly, an integrational strategy of dealing with multicultural identity constitutes a more sustainable alternative to categorization and compartmentalization as it seems supportive of efficacy. Finally, in line with earlier research [3], compartmentalization of multicultural identity was negatively associated with self-consistency. Such findings validate earlier qualitative studies on TCKs' identity fragmentation [8,38].

Regarding well-being associations with multicultural identity configurations, integration was positively, and compartmentalization was negatively associated, though categorization was not connected considerably. Such evidence validates earlier claims that multicultural identity constructs are related to well-being [3,67]. Our findings reconcile contradictory studies on the well-being of multicultural individuals raised between cultures [8,55], implying that configurations of multicultural identities moderate whether TCKs would function well. It is not the mere exposure to diversity but the internal integration versus identity compartmentalization that matters to the well-being of TCKs. Hence, the present study extends previous claims proposing integration as a crucial and enhancing factor in dealing with multiculturalism [3,42]. Additionally, the positive association of self-efficacy with well-being supported previous findings [57], linking positive beliefs about one's abilities with better functioning and adaptive strategies for multicultural individuals. Furthermore, self-consistency was positively related to well-being. The literature explains that a satisfied sense of self-consistency, central to personal identity, may be associated with positive emotions and enhanced well-being [23,56].

#### 4.2. Mediation Models Interpretation

To explain the direct effect of integration and compartmentalization on well-being, we have included self-consistency and self-efficacy as possible mediators suggested in the existing literature on TCKs' functioning [38,68]. Our models revealed significant intermediary effects in multicultural identity configurations' impacts on well-being.

Integration of multicultural identity supported well-being directly, as previously explained, and indirectly through its positive impact on self-consistency and self-efficacy. Integration may support the creation of a hybrid identity encompassing unique cultural composition making one maintain a unique but consistent self-concept. We conclude that integrating all cultural paradigms into oneself stimulates cross-cultural competencies supportive of self-efficacy and creates more sense of self-concept consistency and hence positive self-views that increase life satisfaction and functioning. Such inferences confirm previously suggested processes [68]. Conversely, if TCKs structure their identity based on cultural fragmentation (compartmentalization), their identity consistency can decline, negatively impacting on well-being [8,55].

Interestingly, though no total effect was revealed between categorization and well-being, the mediational model implied an indirect negative effect. Such a situation occurs when there are two opposing causal pathways from a predictive variable. Categorization entails, on one side, increased internal consistency but, at the same time, decreased well-being. Our hypothesis suggesting that it might happen via impaired self-efficacy was rejected. We suggest that to fulfil a motive for self-consistency, one suppresses parts of oneself (categorized multicultural identity), which further weakens the ability to adjust and hence decreases well-being. Another explanation could be that the roots of the categorical strategies lie in rigidity and an essentialist mindset [3], which reduces inclusion and acceptance of one's diverse cultural frames, negatively impacting self-attitudes. Hence, categorization as a configuration of multicultural identity may lead to self-discriminant attitudes similar to categorical attitudes towards culturally diverse "others". Self-discriminant processes, in turn, reduce TCKs' cross-cultural abilities. However, more exploratory studies with other possible mediators are needed to verify these hypotheses.

In summary, the mediation models highlighted the prominent role of cultural integration in third culture individuals' well-being and pointed to its supportive role in forming self-consistency and self-efficacy. We also explained the mechanism behind the positive changes brought by multicultural identity integration suggested in the existing lit-

erature [3,68]. Previous studies indicated that multiculturalism stemming from integration and acceptance, as opposed to exclusion-based assimilation, has created a favorable social context and increased self-esteem, leading to boosted well-being [69]. Our study expanded such claims to the internal cultural diversity of third culture individuals.

#### 4.3. Limitations and Future Directions

Despite its significance, the present study has some limitations. Firstly, the sample had an unequal gender distribution, and the participants were from diverse origins, with a prevalence of South Asian individuals. The potential influence of their own cultural backgrounds on our results cannot be excluded, limiting our study's generalizability. Nevertheless, our participants were of less-studied Eastern origin, and hence, the present study assists in a better understanding of TCKs outside the Westernized perspective. Another limitation concerns the identification of the participants as TCKs, assumed based on a single definition, which may seem limited. Further studies on the level of identification with TCKs and well-being variables are hence recommended. Additionally, there has been some criticism regarding the possibility of people with similar life experiences constituting a social category or a "culture" [70]. However, whilst most literature on the topic relies on the self-identification of adult TCKs, this is still only a quasi-social category. Hence, the results of the present evaluation may also apply to participants categorized more broadly as bicultural, multicultural, or sojourners.

Furthermore, the mediational model and cross-sectional character of the research have indicated limitations related to dependence on initial hypotheses and the inability to conclude actual causal relationships or long-term associations. The mediation effects were weak, suggesting the existence of possible other intermediary variables that could explain our model further. In particular, seeking other mediators of the categorization's effects on well-being as inferred from our analyses' outcome is recommended. Categorization implies exclusion, a rigid mindset, and essentialistic tendencies [3]. Therefore, we propose exploring the factors of mindset rigidity or psychological flexibility as possible mediators.

#### 5. Conclusions

Internationalizations of economies and ease in mobility have increased the numbers of children who grow up between cultures in "mobile" families around the globe. In the UAE, youths raised exposed to cultures different than their parent(s) constitute a majority. Therefore, the research on factors supporting their function is highly salient. This study offered four main contributions. Firstly, we expanded knowledge on TCKs living in a specific context of the multicultural United Arab Emirates. While other studies in the UAE focused primarily on the adverse effect of TCKs' confused multicultural identity on mental health [11], our study explored factors supportive of TCKs well-being which may be used as directions for interventions facilitating TCKs' functioning. In particular, the integration of cultural paradigms seems relevant. Hence, we add to a slowly growing literature on TCKs in the UAE [3,11,12]. Furthermore, our findings suggest that not mere exposure to diversity but internal integration versus identity compartmentalization moderate the well-being of TCKs. Hence, our study contributed to a better understanding of the TCKs' identity paradigm and pointed to multicultural identity integration as vital to the positive functioning of TCKs. Thirdly, we linked the multicultural identity configurations with aspects of self-concept, namely self-consistency and self-efficacy. Lastly, we explored the mechanism behind the multicultural identity configurations' effect on well-being, expanding previous research in this area. The study pointed to the mediating roles of self-consistency and self-efficacy in enhancing the effect of multicultural identity integration on well-being. Alternatively, TCKs with a more compartmentalized multicultural identity might have decreased well-being partially because of a reduced sense of self-consistency. Accounting for increasing numbers of multicultural individuals with transient lifestyles worldwide, this research outcome is valuable to social sciences concerned with the health and functioning of future generations.

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### 6.3. Study 3 – New Ecological Paradigm and Third Culture Kids: Multicultural identity configurations, global mindset, and values as predictors of environmental worldviews

### New Ecological Paradigm and third culture kids: Multicultural identity configurations, global mindset and values as predictors of environmental worldviews

Magdalena Mosanya<sup>1,2</sup>  and Anna Kwiatkowska<sup>1</sup> 

<sup>1</sup>Institute of Psychology, Polish Academy of Science, Warsaw, Poland

<sup>2</sup>Psychology Department, Middlesex University Dubai, Dubai, United Arab Emirates

Ecological degradation threatens human survival, increasing the need to understand factors related to pro-environmental attitudes and worldviews. In a globalising world, new paradigms arise as central to social sciences, including the New Ecological Paradigm (NEP) and the multicultural identities of individuals raised between the cultures, third culture kids (TCKs). NEP is an ecocentric perspective that stresses the interdependence between nature and humans, opposite to anthropocentrism. TCKs' exposure to cultural diversity during developmental years might support global issues engagement and ecocentric worldviews. The present study focused on non-Western TCKs ( $N = 399$ ; mean age 21 years), aiming to explore whether multicultural identity configurations (integration, categorisation, compartmentalisation), values dimensions (self-transcendence, openness and conservation) and global mindset predicted ecocentric and anthropocentric worldviews. The results demonstrated that TCKs were ecocentrically inclined. The path model revealed that ecocentrism could be directly positively predicted by integrated multicultural identity, self-transcendence and a global mindset. Anthropocentrism was predicted by multicultural identity categorisation and conservation values. Also, values of self-transcendence and openness buffered the impact of compartmentalisation and categorisation on ecocentrism and anthropocentrism. This study set innovative directions in multiculturalism and environmentalism discourse through understanding a multicultural identity's relationships with pro-environmental attitudes.

**Keywords:** Ecocentrism; Anthropocentrism; Multicultural identity; Third culture kids; Values.

In a globalised world, ecological problems like global warming and depletion of natural resources become dispersed and complex, demanding collaborative work at the international level (Dunlap et al., 2000). The ecological degradation acknowledged by scientists and global leaders is linked to human activity, predominantly to the development of industrialised societies (Jorgenson, 2006). Despite a growing drive towards the New Ecological Paradigm (NEP), which assumes interdependence between nature and human thriving and sets limitations to human activity and growth (Dunlap et al., 2000; Stern et al., 2008), some people are less concerned about environmental degradation, and express detachment from nature. Several authors attribute such a mindset to a common belief in human dominance over nature (Milfont et al., 2013). Consequently, people differ in the ways they place themselves in the ecosystem.

The tendency to separate oneself from nature and exert power over it is linked with lower environmentalism (Milfont et al., 2013). Hence, tackling environmental problems can involve increasing environmental awareness, inclusiveness and integrity with nature (United Nations, 2015). This may be achieved by stimulating psychological factors such as self-transcendent and openness related values and a global mindset. These may buffer dominant social tendencies and support egalitarian inclusivity of non-human interests.

Changing worldviews and attitudes from anthropocentric (oriented on human growth through the exploitation of natural resources) to ecocentric (prioritising the balance between human and environmental needs) poses challenges. Research points to the conflict between human interests and ecological needs, as environmentalism requires effort and sacrifice (Kollmuss & Agyeman, 2002;

Correspondence should be addressed to Magdalena Mosanya, Middlesex University Dubai, Knowledge Park, Block 16, Dubai, United Arab Emirates. (E-mail: m.mosanya@mdx.ac.ae).

**Magdalena Mosanya:** Conceptualisation, Investigation, Methodology, Writing-Original draft preparation; Writing-Editing. **Anna Kwiatkowska:** Data curation, Methodology, Supervision, Visualisation, Validation, Writing-Reviewing.

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Stern, 2000). When choosing between self-benefits and environmental interests, one tends to select the first. Personal commitments to NEP could be justified if one internalises the environmental case, linking it with personal values and identity.

Considerable research in recent decades (e.g., Brieger, 2018; Duff et al., 2022; Ringov & Zollo, 2007) highlighted the role of culture and identity in dealing with environmental attitudes formation. Brieger (2018) emphasised the role of social identity in fostering environmental concern. Specifically, a tendency to protect the environment relates to the inclusiveness of the groups on which identity was based (community, nation, world). World identity, that is, identification with all human beings, was most beneficial to environmental concerns (Brieger, 2018). This prompts exploration into the role of multicultural identities held by individuals with vast cross-cultural experience, such as third culture kids (TCKs) (Pollock et al., 2017). Yampolsky et al. (2016) argued that multicultural identities vary in inclusiveness (integration vs. categorisation and compartmentalisation). Consequently, environmental attitudes may also be developed differently depending on the identity configurations. However, there are significant gaps in the literature on pro-environmental attitudes, with a notable dearth of data from multicultural, non-Western, developing and nondemocratic societies (Tam et al., 2021). The Middle East region, a hub for multicultural communities, is particularly underrepresented and requires exploration. Furthermore, today's multicultural youth will bear the consequences of environmental degradation; their attitudes towards these issues require attention.

This paper explores whether multicultural individuals with mobile lifestyles, so-called TCKs, could endorse ecocentrism via their extended, hybrid but integrated cross-cultural identity, global mindset and values of self-transcendence and openness. Similarly, it assesses whether exclusive configurations of multicultural identities, such as categorisation or compartmentalisation, encourage conservative values and anthropocentric traditional social paradigms. The theoretical background allowing for such claims is reviewed in the following sections. Furthermore, this study is grounded in the specific multicultural context of the United Arab Emirates, where, according to recent statistics, the ratio between expatriates and local Emirati citizens is 9 to 1 (Global Media Insight, 2021). The UAE is a multicultural state that promotes integration and diversity as a state policy, with many young citizens categorised as TCKs. Hence the UAE constitute an interesting hub for TCKs studies.

### Pro-environmental attitudes and New Ecological Paradigm

Research on pro-environmental attitudes is complex and multidimensional (Schultz et al., 2004) and requires a

multidisciplinary approach (Banwo & Du, 2019). Initiatives aiming at protecting the natural environment depend on many variables, including psychological motivators, that is, values, mindset and culture (Dunlap & Van Liere, 1978; Schultz et al., 2000; Steg & Vlek, 2009). In the context of sustainability, pro-environmental attitudes include “the beliefs, affect and behavioural intentions regarding environmentally related activities” (Schultz et al., 2004, p. 31) and reflect “seeking to minimise the negative impact of one’s actions on the natural world” (Kollmuss & Agyeman, 2002, p. 240). Such pro-environmental attitudes illustrate a worldview that governs an individual’s approach to human-environment relations. Pro-environmental attitudes also denote an interplay among multiple (sometimes conflicting) values and interests (Kollmuss & Agyeman, 2002; Stern, 2000). They imply a difficult choice between egocentric benefits, collective interest and concern for the ecosphere (Banwo & Du, 2019; Kollmuss & Agyeman, 2002; Steg & Vlek, 2009). Combined psycho-cultural factors are possible antecedents or moderators to pro-environmental attitudes (Schultz et al., 2000; Stern, 2000).

Dunlap and Van Liere (1978) developed the NEP as an answer to the realisation that the activity of humans to increase comfort, longevity and dominance was altering the environment irreversibly and risking human survival. NEP illustrates polarised (ecocentric vs. anthropocentric) worldviews (Dunlap et al., 2000). Ecocentrism predicts pro-environmental engagement (De Groot & Steg, 2008) and assumes that humans have a close, interdependent relationship with nature. In contrast, the human-centred approach is less sensitive to ecological issues (Dunlap & Van Liere, 1978). While only ecocentrism predicted environmentally friendly choices for Dunlap and colleagues (1978, 2000), Thompson and Barton (1994) evidenced that such opposite values underlying ecological concerns can lead to pro-environmental behaviours. The differences were in the motives, as the ecocentric perspective focused on the ecosystem for its own sake. At the same time, the anthropocentric mindset values nature only as a necessary element in human domination and survival, and hence is short-termed and less sustainable (Thompson & Barton, 1994). Furthermore, significant differences between countries have been presented in studies on NEP in both adults and children (Boeve de Pauw & Van Petegem, 2012; Corral-Verdugo & Armendáriz, 2000; Schultz et al., 2000).

### Third culture kids identity and environmentalism

Another phenomenon related to the globalised world is an increase in the presence of multicultural individuals, with TCKs being recognised as a specific quasi-cultural group by many scholars (Mosanya & Kwiatkowska, 2021;

Pollock et al., 2017; Stokke, 2013). With the growth in business internationalisation, the TCK category is now primarily comprised of internationally-based employees' children. The term 'third culture kids' denotes individuals who interacted meaningfully with multiple cultural paradigms during their developmental years, usually due to work-related migrations of their parents. Such cross-cultural exposure significantly influences TCKs' sense of identity, relationships with others and worldviews (Pollock et al., 2017). Furthermore, 'third culture' is defined as a shared commonality of those living an internationally mobile lifestyle. It indicates that TCKs may configure a distinctive cultural identity (third culture) that is neither their parents' culture (first culture) nor the host culture (second culture) (Pollock et al., 2017). A similar phenomenon can be found in the theory of third space by Bhabha (1994), which referred to the hybridity of the identities of cross-cultural individuals that are fluid and constantly being made. As TCKs move between cultures before they have had the opportunity to complete the critical task of personal and cultural identity development, they face issues related to identity and sense of belonging (Pollock et al., 2017), which adversely affect well-being (Hoerding & Jenkins, 2011). Yet, there are also multiple advantages to being a TCK. Due to the exposure to diversity, TCKs are suggested to possess a global mindset (Stokke, 2013), global leadership competencies, cultural flexibility, cultural intelligence (Tarique & Weisbord, 2013), cosmopolitanism and expanded worldviews (Pollock et al., 2017). With such a broad, comprehensive, inclusive mindset and skills, TCK individuals, as global citizens, could also exhibit more pro-environmental attitudes.

### Multicultural identity and environmentalism

However, multicultural individuals are not all alike. Alongside TCKs' transcultural character, which may direct their interests towards global matters, other factors might impact their environmental engagement. Brieger (2018) highlighted the impact of collective identity and cultural context on pro-environmental attitudes and proposed framing the sustainability and pro-ecological engagement within identity discourse. A similar approach was proposed by Duff et al. (2022) in a recent study on the effect of self-construals on environmentalism. Hence, multicultural identity might drive TCKs' general attitudes, including environmental views.

The complex identity of multicultural individuals is cognitively configured. For example, Amiot et al. (2007) proposed identity shaping stages in the cognitive-developmental model of social identity integration (CDSMII). Building upon this, Yampolsky et al. (2016) illustrated three ways that multicultural individuals configure their complex identities. These

are integration (all cultures are accepted in the self), categorisation (one dominant cultural self), or compartmentalisation (context-dependent switches between cultural selves). Mosanya and Kwiatkowska (2021) confirmed the existence of such identity configurations for third culture individuals. Similarly, Pollock et al. (2017) acknowledged the presence of such configurations. They referred to categorisation as focused on differences, with compartmentalisation as context-dependent "frame switching." Ultimately, integration implied finding commonalities between diverse cultural paradigms and developing a superordinate, hybrid and inclusive identity similar to Bhabha's (1994) "third space."

Consequently, multicultural identity configurations could also impact the pro-environmental attitudes of TCKs as they have strong associations with psychological processes relevant to environmentalism. Multicultural identity configurations vary predominantly in inclusiveness. Integrated identity is the most inclusive as it encompasses diverse cultural frames and establishes similarities within differences. As egalitarianism is associated with pro-environmental attitudes, an integrated identity could support ecocentrism. In comparison, categorical and compartmentalised identity configurations are hierarchical and exclusive; they may be associated with less egalitarianism. Furthermore, categorisation reflects ethnocentrism with essentialistic tendencies, while compartmentalisation signifies conformity and temporary exclusion (Bastian & Haslam, 2006; Bennett, 2017; Mosanya & Kwiatkowska, 2021). These could possibly extend to anthropocentric tendencies. Such assumptions might be supported by the link between multicultural identity categorisation, social identity categorisation and essentialism (Mosanya & Kwiatkowska, 2021), detrimental to the inclusivity needed for a NEP. The associations between hierarchism and exclusion with dominance, which is further predictive of anthropocentrism, may explain the mechanism behind such a process (Milfont et al., 2013). Subsequently, categorisation and compartmentalisation could result in a distant approach to nature grounded in man's dominance over the environment. In contrast, integration supports inclusiveness while decreasing essentialism and social categorisation (Mosanya & Kwiatkowska, 2021). Thus, integration may relate to a more egalitarian approach towards the environment (ecocentrism). Furthermore, integrated identity is associated with a global mindset and may also support engagement with international matters (including environmentalism) by promoting inclusive worldviews and actions oriented towards cross-cultural collaboration.

### Global mindset and environmentalism

A global mindset is a novel characteristic that facilitates cross-cultural interactions, a critical advantage in a

globalised world (Levy et al., 2007). The global mindset concept has arisen within the organisational behaviour literature and has been discussed at the individual level (Den Dekker, 2011; Mosanya & Kwiatkowska, 2021; Stokke, 2013). An early description of what would now be referred to as a global mindset was a geocentric orientation (Perlmutter, 1969, as cited in Levy et al., 2007), explained as a universalistic and supra-national attitude.

A global mindset relates further to the passion for diversity (Stokke, 2013), cognitive abilities, a “broader mental scope”, egalitarianism and vast cultural knowledge (Den Dekker, 2011, p. 60). A global mindset also encourages the internalisation of more than one cultural worldview (ethnorelativism) and forms an opposite frame of reference to ethnocentrism (Bennett, 2017). Hence, a global mindset as a cognitive ability may favour worldviews independent of any social (categorical) frames and support inclusivity (Levy et al., 2007). While highlighting parallels among all humans (Bennett, 2017; Den Dekker, 2011), a global mindset could also promote inclusive commonalities with non-human beings supporting ecocentrism. Therefore, a global mindset creates favourable conditions for engagement in international affairs and global environmental matters. Additionally, it could support the inclusion of broader membership into self-identification, promoting responsibility for the ecosystem. Multicultural individuals like TCKs could therefore exhibit increased interest in the environment due to the elevated level of the global mindset.

#### Values and environmentalism

Pro-environmental worldviews depend further on values (Banwo & Du, 2019; Kollmuss & Agyeman, 2002), with NEP-based comprehensive research revealing that pro-environmental attitudes imply an interplay among multiple, at points conflicting principles (Kollmuss & Agyeman, 2002; Stern, 2000). Values can be understood as desirable trans-situational goals varying in importance, which serve as guiding principles in life (Schwartz, 1996). They form a hierarchical structure that assists in situational evaluation. Individuals differ on many particular values, which further help to differentiate them in their decision-making and predict behaviours (Schwartz, 2012; Stern, 2000).

In the value model, Schwartz (1996, 2012) evidenced four higher-order clusters of values organised along two dimensions. The first dimension captures the contrast between the openness values (that operate on self-direction and flexibility) versus conservation values (rooted in tradition, security and conformism). The second dimension depicts the opposition between the self-transcendence values (which incorporate universalism and benevolence) and self-enhancement values (motivated by achievement and hedonism). According

to Schwartz (1996), values affect attitudes through a trade-off or balance among the different dimensions, simultaneously relevant to the action and often opposite (e.g., openness vs. conservation). Considering the relationship between values and environmentalism, values grouped around self-transcendence versus self-enhancement and openness versus conservation are predictive of pro-environmental behaviours (Stern, 2000). They may reflect explained earlier ecocentric versus anthropocentric perspectives. Others have attempted to offer extended views on dimensions of the values systems, with similar findings suggesting that values centred on self-transcendence and openness (egalitarianism, altruism) supported pro-environmentalism. At the same time, conservatism hindered it (De Groot & Steg, 2008). Results on self-enhancement values were less consistent, suggesting it relates to environmentalism only if linked with a personal sense of achievement and power (Thompson & Barton, 1994). Hence, self-enhancement might be less stable in time and less relevant to identity and NEP discourse.

Although values are motors of human actions, cultural factors partially mediate behaviour (Bardi & Schwartz, 2003). Therefore, it is unclear which values drive pro-environmental worldviews (i.e., ecocentrism) for novel cultural identity paradigms (like that of TCKs). For TCKs, integrated identity and an elevated level of global mindset could inform self-transcendent values like universalism and benevolence, as they reflect broadmindedness and inclusion. Integration and a global mindset could stimulate the transcendence of selfish needs for dominance over nature. In contrast, categorical identity might link with an endorsement of tradition due to its rigid and exclusive character (Mosanya & Kwiatkowska, 2021). Lastly, compartmentalisation may reflect conformity values (adjustment to context or status quo). It might be that categorisation and compartmentalisation support anthropocentrism due to the higher importance given to a conservation-centred value system.

Moreover, third culture individuals do not have traditional bonds with any culture (Pollock et al., 2017), and their cultural identity is fluid (Hoerding & Jenkins, 2011). Self-transcendence values encompassing universalism and benevolence could help them connect with the natural environment instead of traditional ethnic categories of countries. In such a case, TCKs could exert ecocentric commitment (e.g., belongingness to nature), replacing the need for conventional communities. According to the third space theory of Homi Bhabha (1994), the “third culture” can be understood as a hybrid virtual space of interactions between different cultural paradigms that are always in the process of becoming and, therefore, less categorical and more inclusive (Jamshidian & Pourgivi, 2019). Such fluid identity could be more responsive to new standards, including a NEP.

**Aims and hypotheses**

Exploring possible factors predicting pro-environmental attitudes of multicultural individuals characterised as TCKs is timely and relevant considering post-modern fast-changing reality. This study focused on psychological predictors of a NEP, operationalised as ecocentrism vs. anthropocentrism. Firstly, we examined how NEP factors are evident among TCKs (Research Question). Secondly, we aimed to reveal associations among multicultural identity configurations, values dimensions and the global mindset with ecocentrism and anthropocentrism. As integrative models are recommended, we aimed to propose a model of direct and indirect predictive effects of multicultural identity configurations, values dimensions and global mindset on ecocentrism and anthropocentrism. We hypothesised mediating effects of values and global mindset in the effect cultural identity configurations have on ecocentrism and anthropocentrism. We thus used path analysis to test a set of hypotheses that, if correct, confirm the effect of identity configurations on NEP with values and global mindset in the role of mediators (Table 1).

**The ecological context of the United Arab Emirates**

The fast socio-economic transformation in the United Arab Emirates attracted many emigrants to settle within its borders, leading to prosperity and an unusual, multicultural demographic structure, with South Asians and Middle Eastern emigrants being the most prominent communities (GMI, 2021). The rich blend of cultures has

encouraged the country’s rapid development. Fast growth has also led to the UAE having one of the largest carbon footprints in the world, and the effects of global warming might have particularly dire consequences for the UAE coastline. Hence, many decisive actions have been taken to prevent ecological degradation within just the last decade. As a result, the country’s CO<sub>2</sub> emission is noticeably decreasing (World Bank, 2021). Stern et al. (1993) suggested that public concerns expressed in legislation are promising signs of society’s commitment towards NEP. Further, accounting for the young population of the UAE (Statista, 2021), special initiatives are crafted for youths. A recent report by Emirates Nature-WWF (2020) revealed that 94% of young citizens want to prioritise restoring relationships with nature.

Specific socio-cultural factors presented above motivate research as they may constitute significant barriers or buffers to pro-environmental worldviews. According to Bronfenbrenner’s (1979) model, a person develops within the interacting circles of influences, starting from their personal characteristics, moving on to community levels (for TCKs, cross-cultural or global exposure), which impact values and mindset, followed by macro-level influences, that is, diversity and ecology-related country policies.

**METHODS**

**Participants**

This study included international students (*N* = 399) who considered themselves third culture individuals.

**TABLE 1**  
Tested hypotheses with specific argumentation

<i>General hypothesis (direct effect)</i>	<i>Specific hypothesis with mediator(s) justifications</i>
(H1) Multicultural identity integration positively predicts ecocentrism but negatively anthropocentrism	(H1a) Integration positively predicts a global mindset, which in turn creates a favourable condition for ecocentrism; therefore, a global mindset mediates the effect of integration on ecocentrism (H1b) Integration positively predicts self-transcendent values that promote ecocentrism; hence, self-transcendent values mediate the effect of integration on ecocentrism (H1c) Integration positively predicts openness values that broaden worldviews; hence openness values mediate the effect of integration on ecocentrism
(H2) Multicultural identity categorisation positively predicts anthropocentrism but negatively ecocentrism	(H2a) Categorisation reflects essentialistic tendencies that are also linked with conservative values; hence conservative values may mediate predictive effects of categorisation on anthropocentrism (H2b) Categorisation may limit inclusivity related to universalism and benevolence; negative changes in self-transcendent values may mediate the effect of categorisation on anthropocentrism (H2c) Categorisation may limit openness to diversity; therefore, the categorisation effect on openness values may mediate the categorisation effect on anthropocentrism
(H3) Multicultural identity compartmentalisation positively predicts anthropocentrism and negatively ecocentrism	(H3a) Compartmentalisation reflects (temporary) exclusivity and hierarchy that are also linked with conservative values; hence conservative values may mediate predictive effects of categorisation on anthropocentrism (H3b) Compartmentalisation reflects conformism and may limit (temporary) inclusivity related to universalism and benevolence; hence, negative changes in self-transcendent values may mediate the compartmentalisation effect on anthropocentrism (H3c) Compartmentalisation may limit (context-dependent) openness to diversity; hence the categorisation effect on openness values may mediate the compartmentalisation effect on anthropocentrism

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This identification was based on a definition by Pollock et al. (2017): *Please check YES if you have been raised in a culture other than that of your parents (or culture of the country given on your passport) for a significant part of early developmental years 6–18.* The sample consisted of 256 females (74%) and 103 males (26%) with a mean age of 21.2 years ( $SD = 3.54$ , Mode = 19, Range 18–43). All participants were from non-Western countries and lived in the UAE, with 165 (41%) being Indian passport holders. Reported religions were Muslim 40%, Hindu and Buddhist 22% and Christians 15%, among others. Participants reported having lived in one to seven countries ( $M = 2$ ;  $SD = 3.5$ ; Mode = 2); on average, three languages (Mode = 3; Range 1–6), with the most commonly reported English, Hindi, Malayalam, Tamil and Arabic. They were residents in the UAE between 2 and 30 years ( $M = 13.79$ ;  $SD = 6.3$ ; Mode = 18).

## Measures

*The Revised New Ecological Paradigm Scale (NEP-R)* (Dunlap et al., 2000; Dunlap & Van Liere, 1978) measured pro-environmental attitudes and worldviews. It consisted of 15 items (7 items reverse-scored) rated on a scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). Item sample: *Plants and animals have as much right as humans to exist.* The literature presents irregularities regarding the factor structure of the NEP-R scale (Denis & Pereira, 2014; Dunlap, 2008; Vikan et al., 2007), with most commonly reported one, two or five factors. Hence, Dunlap et al. (2000) recommend factor analysis for a particular sample. Accounting for the unstable factor structure of the scale (Denis & Pereira, 2014; Dunlap, 2008; Vikan et al., 2007), we conducted confirmatory factor analysis (CFA) to confirm the five-factor structure of the NEP scale, as was proposed initially by Dunlap and Van Liere (1978). Poor fit indices suggested that our data did not support the five-factors structure. Moreover, we encountered two problematic aspects. Firstly, although all but one regression weights were significant, several of them were low (.04; .20; .31; .36). Secondly, the high values of correlations between some factors ( $r = .82$  for Limits to growth & Eco-crisis;  $r = .80$  for Anti-anthropocentrism & Nature's balance;  $r = .75$  for Anti-anthropocentrism & Eco-crisis) suggested problems of discriminative validity. Also, the one-factor structure provided fit indices below the required values.

Therefore, we performed exploratory factor analysis (EFA; principal component analysis method with Varimax rotation) and discovered a two-factor solution to be the most adequate. The simple CFA model for the two-factor model showed better performance, though not fully acceptable (only RMSEA and SRMR were below a critical value, i.e., .08). To achieve a better fit, we ran CFA with modifications; this included several covariances

between errors and one item which loaded on both factors. Despite significant chi-square ( $p = .000$ ), other indices proved a good model fit: CMIN/ $df = 1.894$  (below 3); RMSEA = .047 (below .05); PCLOSE = .632 (above .500); CFI = .947 (above .90); SRMR = .500 (equal to criterion .500), and AIC values descending (Appendix S1). Based on obtained two factors, we created two NEP subscales: the Ecocentric Attitude Scale, which consisted of nine items,  $\alpha = .74$ , and the Anthropo-centric Attitude Scale, which consisted of six items,  $\alpha = .71$ . We included the item with cross-loadings to the Anthropocentric Scale because of higher loading on the second (.39) than the first factor (.35) (see Byrne, 2016).

*Portrait Value Questionnaire-Short (PVQ-S)* (Schwartz, 2008) was used to measure self-transcendence, openness and conservation values. The questionnaire presented a variety of portraits of the persons for which respondents needed to answer: *How much like you is this person?* Each value was measured with two items rated on a scale from 1 (*Not at all like me*) to 7 (*Very much like me*). As indicated by theory (Schwartz, 2012), the scores for each value group were centred and further conceived higher order value domains. To control for multicollinearity, three clusters of values were included in the analyses for the study. This involved self-transcendence (universalism, benevolence) ( $\alpha = .89$ ), item sample: *She/he thinks that it is important that every person in the world be treated equally. She/he believes everyone should have equal opportunities in life.* It also included openness (stimulation, self-direction) ( $\alpha = .84$ ), item sample: *She/he likes surprises and is always looking for new things to do. She/he thinks it is important to do lots of different things in life.* Lastly, it assessed conservation (security, conformity, tradition) ( $\alpha = .67$ ), item sample: *Tradition is important to her. She tries to follow the customs handed down by her religion or her family.*

To measure the concept of a global mindset, six items from Den Dekker's (2011) *Global Mindset Scale* were scored on a 7-point Likert scale that ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). The total score reflected an endorsement of global connections and cosmopolitanism. An item sample is: *I am a world citizen* ( $\alpha = .67$ ). We used the CFA to assess the unifactorial structure of the Global Mindset Scale. The CFA model provided acceptable fit to the data:  $\chi^2 = 16,872$ ;  $df = 7$ ;  $p = .02$ , CMIN/ $df = 2.41$ ; RMSEA = .060 [90% CI = .02, .096]; PCLOSE = .288; CFI = .96.

Multicultural identities were assessed by implementing the *Multicultural Identity Integration Scale (MULTIIS)* by Yampolsky et al. (2016). The introduction to the MULTIIS includes a brief definition of cultural identity and cultural context to ensure that all the participants understood the questions. MULTIIS contains three subscales: categorisation (five items,  $\alpha = .75$ ) with item sample: *I identify exclusively with one culture,*

compartmentalisation (nine items,  $\alpha = .80$ ) with item sample: *Each of my cultural identities is a separate part of who I am*, and integration (eight items,  $\alpha = .82$ ), item sample: *My cultural identities are part of a more global identity*, all scored on 7-point Likert scale 1 (*not at all*) to 7 (*exactly*). We used the CFA to assess the three-factor structure of the MULTIIS. The CFA model provided acceptable fit to the data:  $\chi^2 = 398.41$ ;  $df = 196$ ; CMIN/ $df = 2.03$ ; RMSEA = .051 [90% CI = .044, .060]; CFI = .924.

**Procedure**

The ethics approval was obtained from the Research Committee of Middlesex University Dubai. Following this, participants were approached through online platforms for third culture individuals and recruited via snowballing sampling technique. Data were collected using Google Forms. Respondents were informed about the study objectives and non-paid voluntary participation, anonymity, confidentiality and withdrawal rights. After providing their consent, they filled out the aforementioned questionnaires.

**Statistical analyses**

It was a quantitative, questionnaire-based, cross-sectional study. We employed Pearson’s correlation coefficient analyses, paired sample *t*-test, independent sample *t*-test and Structural Equation Modelling (SEM) as path analysis to test our hypotheses. Statistical evaluations were performed in SPSS v.25 and Amos v.25.

**RESULTS**

**Preliminary analyses**

**(RQ1) NEP subscales and gender differences**

The descriptive statistics for all scales are presented in Table 2. The paired sample *t*-test indicated significant

differences between the means of NEP factors ecocentrism ( $M = 5.43$   $SD = .84$ ) and anthropocentrism ( $M = 3.61$ ,  $SD = .91$ ) ( $t = 24.95$ ;  $df = 398$ ;  $p < .001$ ; [95% CI 1.67, 1.95]). Homogeneity of variance for ecocentrism and anthropocentrism for males and females was assumed with non-significant Levene’s tests. There were no significant differences between men ( $M = 5.32$ ,  $SD = .85$ ) and women ( $M = 5.43$ ,  $SD = .83$ ) in the level of ecocentrism ( $t = -1.48$ ;  $df = 389$ ;  $p = .14$ , 95% CI [-.33, .05]) but there were significant differences between men ( $M = 3.91$ ,  $SD = 1.1$ ) and women ( $M = 3.50$ ,  $SD = 1.1$ ) in anthropocentrism ( $t = 3.13$ ;  $df = 389$ ;  $p = .002$ , 95% CI [.15, .66]) with moderate effect ( $d = .4$ ).

**MULTIIS subscales**

The most highly scored multicultural identity configuration was integration, while compartmentalisation had the lowest score. Pairwise comparison of the three subscales has shown that the integration mean score ( $M = 4.91$ ,  $SD = 1.02$ ) was significantly higher than the categorisation ( $M = 4.19$ ,  $SD = 1.04$ ),  $t(399) = 9.44$ ,  $p = .000$ , and significantly higher than compartmentalisation ( $M = 3.88$ ,  $SD = 1.09$ ),  $t(399) = 14.58$ ,  $p = .000$ . Categorisation mean score was significantly higher than compartmentalisation ( $t(399) = 5.22$ ,  $p = .000$ ).

**Values**

Self-transcendent values were the most highly scored values dimensions, while conservation values were the least. A pairwise comparison of the three dimensions has shown that self-transcendent values mean score ( $M = 2.99$ ,  $SD = 1.02$ ) was significantly higher than the openness ( $M = 1.91$ ,  $SD = 1.46$ ),  $t(399) = 21.98$ ,  $p = .000$ , and significantly higher than conservation ( $M = .77$ ,  $SD = .81$ ),  $t(399) = -30.88$ ,  $p = .000$ . Conservation mean score was significantly lower than openness  $t(399) = 16.59$ ,  $p = .000$ .

**TABLE 2**  
Descriptive statistics and correlations of all the variables

Variables (N = 399)	M (SD)	1	2	3	4	5	6	7	8	9
1. Ecocentrism	5.43 (1.42)	—								
2. Anthropocentrism	3.61 (1.14)	-.05	—							
3. Self-transcendence values	2.99 (1.46)	.22**	-.46**	—						
4. Openness values	1.91 (1.32)	.20**	-.41**	.76**	—					
5. Conservation values	0.77 (0.81)	.01	.12*	.32**	.26**	—				
6. Multicultural identity integration	4.91 (1.02)	.23**	-.07	.15**	.10*	.01	—			
7. Multicultural identity categorisation	4.19 (1.04)	.01	.24**	-.24**	-.11*	.11*	.17*	—		
8. Multicultural identity compartmentalisation	3.88 (1.09)	.07	.16**	-.21**	-.20**	-.03	.05	.48**	—	
9. Global mindset	5.37 (.93)	.28**	-.12*	.16**	.14**	.01	.35**	-.05	.05	—

Note: Bold values with two asterisks have significance  $p = .000$ . One asterisk  $p = .001$ . \* $p < .005$ . \*\* $p < .001$ .

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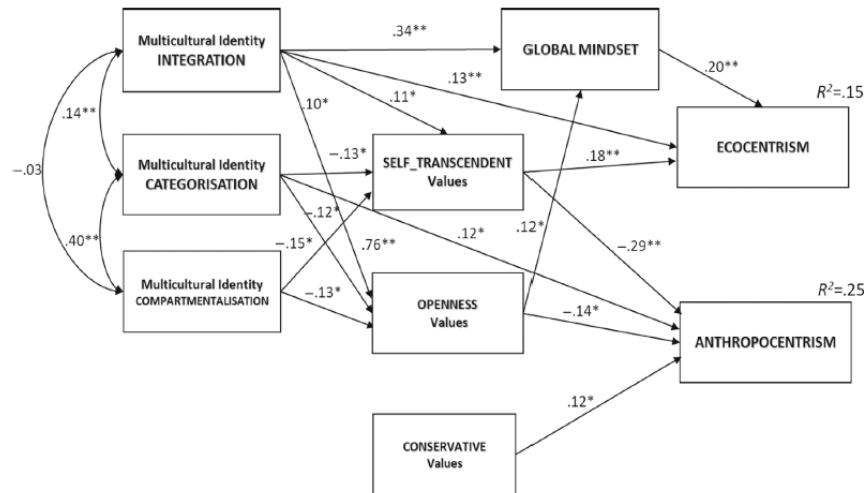


Figure 1. Path model of effects of multicultural identity configurations, values and global mindset on NEP. \* $p < .005$ . \*\* $p < .001$ .

### Correlation analyses (H1 a,b)

Table 2 presents pairwise correlations for all variables. Assessment of the first set of hypotheses revealed significant associations between factors of NEP and multicultural identity configurations, values and global mindset. Ecocentrism was positively associated with self-transcendent and openness-related values, integrated multicultural identity and a global mindset. Anthropocentrism was correlated positively with values centred on conservation and categorisation of multicultural identity. It was further negatively associated with self-transcendent and openness values and a global mindset.

### Path model (SEM)

The path analysis model presented in Figure 1 tested the sequential direct and indirect effects of variables that appeared to be significantly correlated. The initial model was identified by trimming the non-significant paths from the theoretical model, including multicultural identity configurations, dimensions of values and the global mindset as predictors of ecocentrism and anthropocentrism. The model accounted for 15% of the ecocentrism and 25% of the anthropocentrism variance. As suggested by Hu and Bentler (1999), model fit was determined by the chi-square statistics ( $\chi^2 = 28.208$ ,  $df = 16$ ,  $p = .04$ ), (CMIN/ $df = 1.76$ ), (CFI = .983), (RMSEA = .044, CI [.014, .070] PCLOSE = .618) and (SRMR = .039). The fit indices suggested that the model fit the data well. Direct, total and indirect effects are presented in Table 3.

It can be inferred that ecocentrism was directly predicted by multicultural identity integration, self-transcendent values and a global mindset. It was also indirectly predicted on categorisation via its negative effect on self-transcendent values. Anthropocentrism was negatively predicted by self-transcendent and openness values and positively by multicultural identity categorisation and conservation values. Multicultural identity integration (negatively) and compartmentalisation (positively) indirectly affected anthropocentrism via their relationships with self-transcendent and openness values. A post-hoc power analysis was conducted with the implementation of the Soper test. The power of detecting effect was good for ecocentrism (power = .99;  $N = 399$ ;  $R^2 = .15$ ;  $p = .05$ ; predictors = 7), and for anthropocentrism (power = 1.0;  $N = 399$ ;  $R^2 = .15$ ;  $p = .05$ ; predictors = 7).

## DISCUSSION

### New ecological paradigm and TCKs

The present research drew from the notion that culture and identity predict the development of pro-environmental attitudes (Brieger, 2018; Duff et al., 2022; Schultz et al., 2000). Consequently, we aimed to assess the predictive effect of multicultural identity configurations on ecocentrism and anthropocentrism, mediating roles of value dimensions and global mindset for non-Western TCKs with multiple outcomes. Firstly, the results demonstrated the general tendency among TCKs to hold ecocentric worldviews. As a result of early cross-cultural

**TABLE 3**  
Bootstrap SEM analysis of direct, indirect and total effects of multicultural identity configurations, values and global mindset on ecocentrism and anthropocentrism

Predictors (mediators)	Direct effect, $\beta$ (p-value)	Indirect effect, $\beta$ (p-value)	Total effect, $\beta$ (p-value)	Outcome variable	SMC
Multicultural identity integration	.13 (.015)	.09 (.007)	.22 (.012)	Ecocentrism	.15
Multicultural identity categorisation	—	-.03 (.030)	-.02 (.012)		
Multicultural identity compartmentalisation	—	-.03 (.010)	-.02 (.010)		
Self-transcendence values	.18 (.012)	—	.10 (.013)	Anthropocentrism	.25
Openness to experience values	—	.02 (.003)	.02 (.003)		
Global mindset	.20 (.006)	—	.18 (.006)		
Multicultural identity integration	—	-.06 (.046)	-.06 (.046)	Self-transcendence values	.06
Multicultural identity categorisation	.12 (.035)	.06 (.009)	.18 (.012)		
Multicultural identity compartmentalisation	—	.07 (.015)	.07 (.009)		
Self-transcendence values	-.37 (.004)	—	-.37 (.000)	Openness to experience values	.05
Openness to experience values	-.14 (.039)	—	-.14 (.012)		
Conservative values	.12 (.021)	—	.17 (.021)		
Multicultural identity integration	.11 (.022)	—	.11 (.003)	Global mindset	.14
Multicultural identity categorisation	-.13 (.008)	—	-.13 (.008)		
Multicultural identity compartmentalisation	-.15 (.018)	—	-.15 (.021)		
Multicultural identity integration	.11 (.005)	—	.11 (.000)	Global mindset	.14
Multicultural identity categorisation	-.13 (.001)	—	-.13 (.001)		
Multicultural identity compartmentalisation	-.14 (.018)	—	-.14 (.009)		
Multicultural identity integration	.35 (.020)	.01 (.009)	.36 (.000)	Global mindset	.14
Multicultural identity categorisation	—	-.01 (.007)	.01 (.021)		
Multicultural identity compartmentalisation	—	-.02 (.012)	.02 (.004)		
Openness to experience values	.12 (.011)	—	.12 (.005)		

Note: Standardised estimates reported; p-values obtained through the bias-corrected and accelerated bootstrap interval; SMC = squared multiple correlations.

exposure, TCKs develop global leadership skills (Tarique & Weisbord, 2013). They might feel more responsible for global environmental issues and be more concerned with them. We also suggest that exposure to various cultural paradigms in developmental years could create a sense of connectedness with the whole planet and more ecocentric worldviews. Bronfenbrenner’s (1979) model suggests that worldviews depend on community impact, in addition to personal experiences, which for TCKs consist of early, multiple migrations and transient lifestyles. Hence, for TCKs residing in the UAE, the general economic welfare, diversity-promoting and pro-ecological country policies may have created a supportive environment for the development of ecocentrism.

**Sociodemographic characteristics and NEP**

There were no gender differences among our non-Western TCK participants in their level of ecocentrism, but males expressed significantly greater anthropocentrism. Thus, both genders seemed to equally acknowledge the possibility and even the existence of an eco-crisis. Still, men did not connect this with human activity because they were less likely to believe that the earth has limited resources exerting a more anthropocentric worldview. It might be more difficult for men to reject the thesis about the uniqueness and dominance of humans. Milfont et al.’s (2013)

proposition that the tendency to dominate, which predicts nature disconnection and anthropocentrism, may explain why men scored higher on anthropocentrism. Numerous studies have found that, compared to women, men express higher levels of social dominance orientation (Schmitt & Wirth, 2009). Finally, accounting for the growing ecofeminism movement (Resurrección, 2017), men in collectivist, non-Western societies might be more attached to traditional, dominant, anthropocentric paradigms.

**Multicultural identity and values**

According to Bardi and Schwartz (2003), values play an adaptive function; hence values clusters significantly associated with multicultural identity configurations might be central to dealing with multiculturalism for third culture individuals. Identity integration was significantly intertwined with self-transcendence and openness related values. For integrated TCKs, the principles of universalism, benevolence and self-direction seem central motivators. TCKs’ ‘nomadic lifestyle’ necessitates incorporating many, often contradictory cultural paradigms (Pollock et al., 2017). This requires high levels of flexibility, inclusivity, diversity acceptance, openness and universalism - a core of self-transcendence. Such attributes can further serve as a bridge to integration. Therefore, openness on one side and universal acceptance on the

other could help integrate diffused and rootless identity of TCKs (Hoersting & Jenkins, 2011; Pollock et al., 2017). Additionally, values of universalism and benevolence stimulate acceptance towards outgroups and contribute to positive social relations (Schwartz, 2012). Our findings extended such thesis and suggest that self-transcendence values could also be an outcome of an integrating process of the internal cultural diversity of TCKs.

Conversely, TCK individuals may build their identity based on rejection (permanent or momentary) of some of their cultural selves. This denial may lead to identity formation in categorical or compartmentalised ways (Mosanya & Kwiatkowska, 2021; Yampolsky et al., 2016). Our results evidenced such a process by revealing negative relationships between categorisation and compartmentalisation and values grouped around openness and self-transcendence. We infer that TCKs who configure their multicultural identity on categorisation or compartmentalisation display less openness or universalistic values. Furthermore, correlational analysis confirmed the positive association between multicultural identity categorisation and conservation-focused values. Yet, such a connection was weak and dropped out of importance within the model. Such an outcome may suggest that for multicultural individuals with mobile lifestyles, tradition, conformism and security-related values are not central to their functioning or environmental attitudes. Instead, our model highlighted openness and self-transcendence focused values as core principles of TCKs.

#### Multicultural identity configurations, values and NEP (model interpretation)

Our predictions that integrated multicultural identity was associated with ecocentrism and that categorical multicultural identity was supportive of anthropocentrism were confirmed. Compartmentalisation had a more intermediary role. Identity and culture constitute essential components moderating pro-environmental attitudes (Brieger, 2018), yet only the integrated configuration of multicultural identity supports ecocentrism for TCKs. Promoting multicultural identity integration among TCKs could simultaneously encourage their adaptation of the New Environmental Paradigm. The multicultural identity of TCKs based on relationships with many cultures and acceptance of diverse paradigms could create an inclusive, egalitarian base to develop all-encompassing principles, values and mindset supportive of ecocentrism. Furthermore, integration carrying egalitarian characteristics (no culture is superior) could counteract dominance orientation while embracing environmentalism (Milfont et al., 2013). Contrastingly, the categorical identity may result in a neglect of the environmental needs. Our path model further explained the mechanisms responsible

for such an effect, particularly the mediational role of self-transcendent values and a global mindset.

For TCKs, values grouped around self-transcendence and openness were predicted on integrated multicultural identity. Considering TCKs' sense of homelessness, integration with nature could exert ecocentric commitment replacing the need for conventional communities and constitute an alternative to fluid identity (Hoersting & Jenkins, 2011). For novel phenomena of the third culture, reflecting third space in the theory of Bhabha (1994), loosened traditional bonds and increased flexibility may serve as a bridge towards ecocentrism through integration with the environment. The mediational role of benevolence might be seen in the development of kindness and openness to the non-human world. Additionally, self-transcendence was also an important buffer to anthropocentrism. These findings align with existing literature as values included in self-transcendence, namely universalism and benevolence, reflect unity with nature, understanding, tolerance and protection of the global welfare, contributing to positive social relations and care for others (Schwartz, 2012). Conversely, in the model, the multicultural identity configurations of categorisation and compartmentalisation supported anthropocentrism; categorisation directly and both also via a detrimental effect on openness values. These configurations have also had negative associations with self-transcendent values impeding their supportive effect on ecocentrism. One may infer that non-integrated TCKs may be less motivated by openness and self-transcendence, resulting in more anthropocentric worldviews.

The model further indicated a global mindset's prominent role in shaping ecocentric worldviews. The concept of a global mindset overlaps the ideas of cross-cultural competency, universalism and flexibility of TCKs (Den Dekker, 2011; Stokke, 2013). Thus, it could be interpreted as the value of common humanity beneath any social frame. Our findings further extend global mindset value to a common ecology. As the global mindset emphasises similarities between humans (Bennett, 2017; Den Dekker, 2011), it could also highlight the commonalities shared with nature and animals and soften categorical barriers and rigid distinctions between humans and nature. For such a mindset to evolve, values of self-transcendence are required. Principles centred on universalism, benevolence and openness may help one cross a self-focused or tradition-focused mindset. Consequently, our study extends previous assumptions that the global mindset predicts ethnocentrism (Bennett, 2017). It may help individuals bypass social categories and essentialism (Mosanya & Kwiatkowska, 2021) to facilitate environmentalism.

Lastly, the positive relationship of principles clustering around conservation (tradition and conformity) with anthropocentrism aligns with Schwartz (2012), who emphasised that tradition is rooted in mindsets of rigidity and subordination and may lead to the endorsement

of the traditional social paradigm (anthropocentrism). Conservatism, centred on human needs within narrow cultural frames, seems the opposite of the global mindset and the NEP (Dunlap et al., 2000; Schultz et al., 2005). The ties between conservatism and conventionalism might explain such an outcome. In ecological discourse, conventionalism reflects the traditional paradigm centred on human growth. Furthermore, Schwartz (2012) suggested that values centred on conservation relate to disturbances in intergroup relations. Most environmental problems in the twenty-first century need transgroup collaboration and international level care, and traditionalistic principles may undermine such efforts. Conversely, a global mindset that advocates diversity and novelty (Den Dekker, 2011; Stokke, 2013) protects from such an effect as it correlates positively with enthusiasm for outgroup encounters (Bennett, 2017). Conservation did not seem to be mainly linked with the identity of multicultural TCKs, especially within the model, in which other values played a more substantial role. Because TCKs are not tied to strict social categories, conservation is a less vital drive of their worldviews.

Summing up the model, we may infer the answer to the question of what factors may support multicultural individuals' pro-environmental care. TCK individuals who exert a more ecocentric worldview are characterised by integrated multicultural identity, self-transcendence, openness-oriented values and a global mindset. We point to the egalitarian character of these psychological notions and suggest that they may assist multicultural TCKs in avoiding the dominant tendencies known to impair environmentalism (Milfont et al., 2013). Therefore, our study presents the aforementioned factors as possible buffers to the anthropocentric domination in the non-human world.

#### Limitations and future directions

While interpreting the findings, some limitations need to be considered. The cross-sectional nature of this research, the mediational model's dependence on initial hypotheses, potential for socially desirable participant responses, sample specificity and the unequal gender distribution potentially decrease the study's findings' generalizability. Also, the model explained 15% variance in ecocentrism and 25% variance in anthropocentrism; it is likely that additional psychological factors could expand our model. Further research should address this using longitudinal designs. Additionally, this study focused on a specific sample of multicultural third culture individuals living in the UAE. Hence, the inferences (mainly related to identity based on a single cultural frame and anthropocentrism) may not generalise to the population. In the case of monocultural individuals, some evidence exists on forms of strong national identity (e.g., national narcissism) opposing environmental concerns (Cislak et al., 2020), but more studies are needed. Besides, the demographic and social

characteristics of the UAE residents might have affected the study's outcome, and replication with diverse samples is recommended. Yet, it is worth highlighting that the current sample consisted of under-researched non-Western participants, which allowed for extending psychological knowledge outside the Westernised frame of reference.

#### CONCLUSION

In the twenty-first century, it has become clear that human survival and flourishing depend on international collaboration at the global level to ensure environmental sustainability. Drawing on established theories, our research has linked pro-environmental worldviews with multicultural identity and its integration. We set innovative directions in multiculturalism and environmentalism discourse by examining the role of a global mindset and values of self-transcendence and openness. In the dawn of the changing world, ecology constitutes a central notion. Today's young, multicultural people are some of the future leaders with essential roles to play in sustainability. Consequently, it is crucial to deepen knowledge on how to stimulate their ecocentric worldviews, enabling them to lead positive change. The present study highlighted how identity integration, global mindset and self-transcendent values could assist in developing the NEP.

#### ETHICAL COMPLIANCE STATEMENT

This research was approved by the Research Committee of Middlesex University Dubai in accordance with the international ethical standards, Helsinki Declaration 1964 and its amendments. Informed consent was obtained from all individual adult participants included in the study.

#### DATA AVAILABILITY STATEMENT

The data supporting this study's findings are available on request from the corresponding author.

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#### SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

**Appendix S1.** NEP scale factor models fit indices.

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**6.4. Study 4 – Global mindset as a predictor of life satisfaction of Asian international students:  
The mediational role of self-efficacy**

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## Global Mindset as a Predictor of Life Satisfaction of Asian International Students: The Mediational Role of Self-Efficacy

MAGDALENA MOSANYA

*Institute of Psychology, Polish Academy of Sciences, Warsaw,  
Middlesex University Dubai, United Arab Emirates*

### Abstract

The social and economic processes of the 21<sup>st</sup> century, related to globalisation, have provoked an increase in the number of multicultural individuals, the children of expatriates on overseas posts. Further, a rise of multicultural societies, like one of the United Arab Emirates without a dominant cultural frame can also be observed. These spur the necessity to seek mechanisms supporting cross-cultural individuals' functioning in an increasingly globalised world. Global mindset, a notion rooted in international leadership studies, has been an evidenced predictor of achievement in a multicultural business environment. Furthermore, self-efficacy has demonstrated a positive impact on organisational and personal success and enhanced self-concept. In the present study, we combine these two variables in one model to explain the mechanism of the global mindset's impact on life satisfaction for international students of Asian origin ( $N=277$ ) with self-efficacy as a mediator of such a relationship. Our model explained 30% of the

variance in life satisfaction with the mediational analysis supporting self-efficacy as a mediator in a positive effect of global mindset on well-being. Our study, therefore, fed into a better understanding of the mechanism of global mindset enhancing the impact on the life satisfaction of cross-cultural individuals and hence contributed to the postmodern psychological knowledge. Accounting for the dynamic characters of self-efficacy and global mindset, we further set a new field of exploration for possible interventions targeting international students' flourishing.

**Keywords:** global mindset, self-efficacy, multiculturalism, globalisation, life-satisfaction

**JEL Classification Code:** I31

## Introduction

In the 21<sup>st</sup> century, the business reality has become exceedingly ambiguous, complex, and interdependent on global collaboration and cross-cultural abilities (Caligiuri & Tarique, 2012). The globalisation processes led to new phenomena worldwide, with leadership characterised by cultural sensitivity and cross-cultural managerial skills central focus. Furthermore, such leadership roles might be filled by individuals who possess cross-cultural abilities and a global mindset, so-called third culture kids (TCKs) (Stokke, 2013). TCKs are defined as people who meaningfully interacted with two or more cultural environments during their early years (Pollock et al., 2017; Stokke, 2013). Such culturally diverse experience has multiple advantages: global leadership skills, intercultural sensitivity, cosmopolitanism, multilingualism, and potential for global mindset (Cho, 2009; de Waal, 2020; Fail et al., 2004; Stokke, 2013). Global mindset is essential for international leaders and individuals in multicultural environments (den Dekker, 2013). There is also early evidence of its supportive impact on the well-being of TCKs (Mosanya & Kwiatkowska, 2021).

It might be particularly relevant to the young professionals living in the multicultural environment of the United Arab Emirates. After fast-paced development in recent decades, this Gulf country has turned into a multicultural hub for international business. Within the UAE exist diverse cultural paradigms without a need to assimilate with a dominant culture. Furthermore, the number of inbound tertiary students is nearly five times larger than outbound students, most of whom are of Asian origin. Hence, university graduates are predominantly third culture individuals (Mosanya, 2019). During university years and after graduation, young professionals are expected to exert cross-cultural abilities and sensitivity in their everyday functioning while entering the professional market. The early explorative research of Mosanya and



Kwiatkowska (2021) presented the value of global mindset to the well-being of TCKs living in the UAE. The present study explored further the mechanism behind such a relationship proposing that self-efficacy may act as a mediator.

### The well-being of multicultural individuals

People spend more than half of their lives working (US Department of Labour, 2018); hence their well-being should constitute a central objective of employers, health care providers, and policymakers. It also matters as subjective well-being was shown to be reciprocally connected with productivity (Schwartz, 2013). Optimal performance was evidenced as a characteristic of employees with a higher level of experienced life satisfaction and level of happiness. Further, work satisfaction seems to depend on life satisfaction (Weziak-Bialowolska et al., 2020). Subjective well-being (SWB) is a multidimensional notion, defined as life satisfaction, optimal functioning or happiness (Diener et al., 1999), with life satisfaction reflecting a significant ability to deal with life circumstances (Kostka & Jachimowicz, 2010). SWB can also be extended to the sense of control over one's life, self-efficacy (Huppert, 2009), and a combination of psychological positivity with physiological health (Grob, 1995). Likewise, the work context and environment can have a noticeable impact on the well-being of employees (Giorgi et al., 2018). In a multicultural setting, one might be more stressed if not competent to deal with diversity. And young people have been particularly prone to stress in Arab countries (Fawzy & Hamed, 2017; Mosanya, 2019). Still, their exposure to multicultural paradigms in the UAE multiethnic population may spur their multicultural competencies and skills (Tarique & Takeuchi, 2008).

Culture, psychology, and business are interrelated (den Dekker, 2013; Markus & Conner, 2013), and commitments to the socio-cultural environment influence identity, thinking patterns, intelligence, and self-concept (Bandura, 1977). Culture can be further explained as a way of living and relating with others, consisting of values, beliefs, meanings, conventions, and artefacts (Kitayama & Park, 2010). There have been many studies on cross-cultural effectiveness and abilities (Smith & Bond, 1999; Thomas, 2002), suggesting that multicultural individuals might possess abilities to interact better within culturally diverse contexts (Caligiuri & Tarique, 2012). At the same time, little is known about the mechanism explaining such a positive impact of cross-cultural abilities and sensitivity incorporated in a notion of global mindset on the well-being of multicultural individuals. The literature has not concluded on the factors that stimulated by global mindset might feed into a better functioning and flourishing of cross-cultural professionals. Thus the present study proposes that self-efficacy (SE), a variable derived from the social cognitive theory (SCT) (Bandura,

1989), which is a subjective perception of an individual's own abilities in performing a particular task, may individually mediate the impact of global mindset on the subjectively experienced well-being for multicultural individuals (Bandura, 1977).

### Global mindset

One of the attributes enabling international interactions and successful management of cultural diversity is global mindset. This concept constitutes an essential subject within the leadership and cross-cultural management literature (French, 2016). Global mindset can be defined as a critical quality in a globalised business environment (Levy et al., 2007), a predictor of international success (Gupta & Govindarajan, 2002) and an essential factor related to the functioning of international individuals (den Dekker, 2013; Stokke, 2013; Mosanya & Kwiatkowska, 2021).

Historically, Perlmutter's (1969 as cited in Levy et al. 2007) geocentric orientation has set the field for developing the notion of global mindset. Perlmutter described three perspectives that individuals could take in international encounters: ethnocentric (home country-focused), polycentric (host country-focused), and geocentric (globally-focused). Geocentric orientation referred to what is now understood as a global perspective, an inclusive mindset based on universalistic values (Story, 2011). French's (2016) revision of global mindset definitions concluded that they are often conceptualised via their dissimilarity to domestic orientation. Since then, there have been continuous conceptual ambiguities related to the notion of global mindset, and hence Levy and colleagues (2007) attempted systematisation of its definition. They pointed out that there are two underlying themes behind each perspective on global mindset, namely cosmopolitanism and cognitive complexity. The authors proposed further a more comprehensive definition of global mindset as a highly complex cognitive process of perception characterised by an openness to multiple cultural and strategic realities on both international and local levels and the cognitive ability to integrate these diversities (p. 27).

Alternatively, most authors understand global mindset as cross-cultural abilities, close to cultural intelligence, including knowledge and appreciation of foreign cultures (Adler & Bartholomew, 1992), an ability to adapt to cultural standards (Estienne, 1997). French (2016) criticised such a perspective by pointing out that the biggest weakness in studies on global mindset was the lack of focus on the cognitive part to it, with inflated emphasis on the behavioural and attitudinal aspects. He further conceptualised global mindset as a cognitive filter or knowledge structure. The research has brought a similar perspective on global mindset by den Dekker (2013). In his quest towards the empirically-based conceptualisation of global mindset,

den Dekker explained it as a “set of cognitive attitudes that are positively related to globalisation processes” (p. 24). A similar perspective on global mindset has also been adopted by Gupta & Govindarajan (2002), who also proposed a conceptual framework distinguished between organisational and individual global mindsets. From a corporate perspective, the central value of global mindset was accurate and quick decision making in response to culturally new markets. On the individual level, global mindset reflected beliefs in equality of all people from different cultures, openness to a novel cultural situation, excitement versus anxiety in dealing with cultural diversity, and ‘hybridity’ of value systems (Gupta & Govindarajan, 2002). Hence, global mindset could appear as the alternative to negative attitudes towards ‘others’ due to positive assessment of culturally different individuals and enabled abilities to perceive similarities within diversity.

Kefalas (1998), early on in the discussion on global mindset, suggested that it is an acquired attribute, not an innate quality. Out of the factors that might influence the development of global mindset, den Dekker (2013) pointed out personality traits (openness to experience), national characteristics (individualism, low power distance), and demographic factors (early exposure to diversity). Cross-cultural interactions and curiosity about other cultures are two fundamental aspects of global mindset, according to Gupta and Govindarajan (2002), and has also been seen as characteristics of third culture kids (Stokke, 2013). Den Dekker (2013) also pointed out cross-cultural knowledge as a necessary (if not crucial) constituent of global mindset.

However, other factors, like self-efficacy, also play a significant role in developing the global orientation (Gupta & Govindarajan, 2002). While the exposure to diversity and cultural knowledge are usually present in the experience of international students, the active component of the process, the conscious activation of the global frame of reference, might depend on other factors. Passive exposure to diversity does not seem to suffice to assure the growth of global mindset (Gupta & Govindarajan, 2002). Lovvorn and Chen (2011) argued further that international experience was not a determinant of global mindset. They suggested that cultural intelligence is moderating if the international experience, for example, exposure to cross-cultural interactions, will transform into global mindset. Tarique & Weisboard (2013) added the importance of openness to experience to the development of intercultural competencies for third culture individuals. Besides, some factors can block its development, namely strong national identity (Cogin & Fish, 2010), power distance, and collectivism (Srinivas, 1995 as cited in den Dekker, 2013).

The research highlighted a higher latency for global mindset among multicultural individuals, with them being also more flexible, adaptable, curious, and more likely to welcome change (Stokke, 2013). This is in line with other studies, as an early

and more frequent exposure to different norms and values was correlated with global mindset in the research of den Dekker (2013) and with predispositions for a metacognitive cultural intelligence (Tarique & Takeuchi, 2008). Although cultural intelligence is not identical to global mindset, possessing a higher level of cultural intelligence is associated with an increased global mindset (Lovvorn & Chen, 2011). Both concepts can have a profound impact on TCKs' sense of multicultural competencies in the form of cross-cultural self-efficacy (Gupta & Govindarajan, 2002)

### Self-efficacy

Drawing upon the social-cognitive theory (Bandura, 1977, 1989), self-efficacy (SE) is a central construct from which the notion of self-concept is derived. SE is defined as personal beliefs over one's competencies. Thus, self-efficacy is quantified as a trust in one's ability to carry out specific tasks and reach expected performance levels. The concept of self-efficacy is believed to be influenced by experiences, social models and social persuasion and to impact behaviour, mood states and experienced well-being (Bandura, 1991).

Self-efficacy feeds into self-concept (a subjective way one perceives themselves), and any distortions in self-concept and its constituents, i.e., self-efficacy, result in a significant weakening in self-perception (Tafarodi & Swan, 2001). Self-efficacy is further a contributing factor to success, including organisational and academic performance (Judge et al., 2011; Sharma & Nasa, 2014). Furthermore, self-efficacy is associated positively with achievement, cognitive effectiveness and persistence (Honick & Broadbent, 2015; Shonali, 2010; Yokoyama 2019) for Western cultures. Similar results have also been seen among collectivist cultures, where self-efficacy improves self-esteem and social functioning (Afari et al., 2012) and decreases depressive symptoms (Mosanya & Petkari, 2017). Reversely, a high level of perceived self-efficacy is seen as positively supporting self-evaluation and functioning (Milam et al., 2019).

There are two types of SE, namely generalised and specific. While generalised self-efficacy reflects awareness of one's capabilities to perform across a variety of conditions (Judge et al., 1998), specific SE relates to a particular task. Global mindset could reflect the unique self-efficacy regarding multicultural competencies. Bennett's (1986) Model of Intercultural Sensitivity (MIS) could set a framework for such understating of the role of self-efficacy in building global mindset. MIS emphasised that an increase in intercultural experiences might lead to intercultural effectiveness and, ultimately, integration of all cultural paradigms that a person is exposed to (Bennett, 2004). Furthermore, a high level of the global mindset could

strengthen the sense of cognitive and behavioural abilities to thrive in a multicultural environment. Such an uplift to self-efficacy might, in turn, stimulate the self-concept, leading to enhanced well-being.

### Aims and hypotheses

The present study, drawing upon theories of global mindset (den Dekker, 2013) and the social-cognitive theory (Bandura, 1989), aimed to find out the mechanism explaining the causal relationships between global mindset and life satisfaction for multicultural non-Western individuals. We first hypothesised (H1) that global mindset positively predicts life satisfaction. Secondly, we postulated (H2) that self-efficacy positively affects life satisfaction. Thirdly, we aimed to explore if self-efficacy plays an intermediary role in the life-satisfaction enhancement effect caused by global mindset. Hence, it was hypothesised (H3) that the relationship between global mindset and life satisfaction was mediated by self-efficacy.

## Methods

### Design

We have incorporated a cross-sectional, questionnaire-based design for our study. To test our hypotheses, a mediational model was proposed. In psychology, the theoretical articulation of mediation has been long present (Barron & Kenny, 1989; Rozeboom, 1956), allowing for exploration of the intermediary processes underlying causal relationships. Statistics were performed in SPSS v. 25 with Hayes macro.

### Participants

Our participants ( $N=277$ ) were international students of Asian origin (females 74%), with the majority coming from India (83.3%) and Pakistan (8%). Their mean age was 20.1 ( $SD=2.22$ , Mode=19, Range 18–36). They spoke on average 2.78 ( $SD=.98$ ) languages (Mode=3, Range 1–6). All participants studied in the United Arab Emirates and considered themselves third culture individuals.

## Measures

*General Self Efficacy Scale* (GESES, Schwarzer & Jerusalem, 1995) was used to determine participants' self-efficacy, incorporating rating on a 7-point Likert scale of 1 (*not at all*) to 7 (*exactly*). It was a 10-item questionnaire ( $\alpha = .88$ ) with the item sample: "Thanks to my resourcefulness, I know how to handle unforeseen situations."

*Global Mindset Scale* (den Dekker, 2013) consisted of four items scored on a 5-point Likert scale that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). The item sample was: "I am a world citizen" ( $\alpha = .64$ ).

*The Berne Questionnaire of Subjective Well-Being* (Grob, 1995) assessed subjective well-being, rated on a 7-point Likert scale of 1 (*not at all*) to 7 (*exactly*). The scale consisted of subscales, and we have used only items related to *life satisfaction*, indicating a positive attitude toward life, joy in life and absence of depressive mood (17 items,  $\alpha = .91$ ). The item sample: "I am content with the way my life plans are being realised."

## Procedures

The Ethics Research Committee of Middlesex University Dubai approved the study. The data was collected online using the Google Forms platform via sites for international students or expatriates living in the UAE. The participants were informed about their rights and voluntary participation. They all had to sign the consent form before filling the questionnaires.

## Results

### Descriptive statistics and correlations

Descriptive statistics and Pearson's correlation analyses for all the scales have been presented in Table 1. All the variables demonstrated significant correlations pairwise. Global mindset showed weak positive relationships with self-efficacy and life satisfaction. Self-efficacy and life satisfaction have also been positively associated at the moderate level (Table 1).

**Table 1. Means, standard deviations, and correlations of global mindset, self-efficacy, and life satisfaction**

Variables (N=243)	M (SD)	1	2	3
1. Global Mindset (GL)	5.43 (.91)	-	.23**	.15*
2. Self-Efficacy	5.13 (.99)		-	.54**
3. Life Satisfaction	4.55 (1.06)			-

\* $p < 0.05$ ; \*\*  $p < 0.01$

Source: own work

### Analysis of mediation

(H1) *Global mindset positively predicts life satisfaction.*

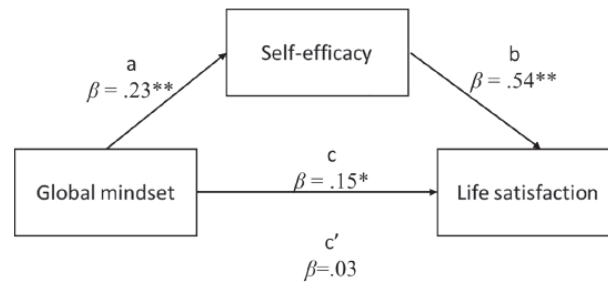
Analysis of mediation (Figure 1) revealed a direct effect of global mindset on life satisfaction (path c) ( $\beta = .15, p = .01, 95\% \text{ CI } [.043, .314]$ ). Furthermore, there was a direct effect (path a) of global mindset on self-efficacy ( $\beta = .23, p < .001, 95\% \text{ CI } [.127, .373]$ ).

(H2) *Self-efficacy positively affects life satisfaction.*

Self-efficacy was significantly predicting life satisfaction (path b) ( $\beta = .54, p < .001, 95\% \text{ CI } [.487, .702]$ ). Hence, the prerequisites for the mediation model were fulfilled (Baron & Kenny, 1989).

(H3) *The relationship between global mindset and life satisfaction was mediated by self-efficacy.*

**Figure 1. The model presenting self-efficacy as a mediator of the impact of global mindset on life satisfaction**



Source: own work

After the SE mediator was included in the model of regression, which was of a good fit ( $F(2,275) = 58.83, p < .001$ ) and explained 30% of the variance in LS; the *c* path became non-significant (path *c'*) with global mindset not being a significant predictor of LS any more ( $\beta = .03, p = .59, 95\% \text{ CI } [-.087, .150]$ ). The indirect effect of self-efficacy ( $IE = .15$ ) was positive and statistically significant  $95\% \text{ CI } (.0791, .2041)$ . Hence, the hypothesis was positively evaluated, with self-efficacy as a mediator of the impact of global mindset on well-being.

## Discussion

Our study has presented multiple findings. Firstly, we have confirmed that global mindset has a positive impact on the well-being of international students. Therefore, we have extended preliminary suggestions by Mosanya & Kwiatkowska (2021) in their explorative study on multicultural females that global mindset is beneficial to the functioning of multicultural individuals in the cross-cultural context. Also, previous studies limited global mindset's power to the business environment success (den Dekker, 2013) and we have expanded its impact to life satisfaction.

Furthermore, we have evidenced the relationships of global mindset with self-efficacy for third culture individuals. Such findings align with the literature, as self-efficacy and discipline have been evidenced to play a significant role in developing the global orientation (Gupta & Govindarajan, 2002). Such a relationship can be further explained by the fact that a central constituent of the global mindset's notion, a passion for diversity (Stokke, 2013), can lead to an increased belief in one's competencies in dealing with the multicultural environment. Likewise, enhanced cross-cultural aptitudes further lead to increased general efficacy. Furthermore, self-efficacy has been linked to professional success and job satisfaction (Judge et al., 2011). Hence, we suggest that, indirectly, via its support to efficacy, global mindset can support the professional growth of individuals who internalise multiple cultural paradigms, but more research is needed.

Moreover, this study presented an attempt to understand the intermediary role of self-efficacy in the relationships between global mindset and life satisfaction for third culture individuals. Our findings confirmed the hypothesis of self-efficacy as a mediator of global mindset's positive impact on life satisfaction. Such outcomes tap on the idea that global mindset assists in integrating cultural diversity, which leads to increased capabilities in dealing with a cross-cultural environment (Bennett, 1986; Den Dekker, 2013). Such capabilities benefit the sense of self-efficacy in dealing with a globalising and culturally complex world. Reversely, a low level of global mindset could weaken self-efficacy leading to confusion and decreased beliefs



in one's resourcefulness, impairing at the same time self-concept and related well-being (Milam et al., 2019).

Besides, self-efficacy beliefs are usually determined and modified by a few factors with personal accomplishments and vicarious experiences, as some most important (Van Vianen, 1999). Hence, successful dealings with cross-cultural issues and thriving in the international environment are significant to self-efficacy establishment. Global mindset plays a crucial role in such a process with its fundamental aspects, i.e. cross-cultural interactions and curiosity about other cultures, stimulating positive experiences related to cross-cultural encounters (Gupta & Govindarajan, 2002). Further, these factors increase a sense of competency for multicultural individuals in dealing with diversity at work and in daily life. Therefore, active participation in diversity as a competent contributor can be predictive of TCKs' life satisfaction. Judge et al. (2011) have evidenced the prominent role of self-efficacy in positive self-concept, and global mindset could be supportive to self-concept via increased competencies related to multicultural abilities for multicultural individuals.

Additionally, passive exposure to diversity does not seem to suffice to assure the growth of global mindset (Gupta & Govindarajan, 2002). Lovvorn and Chen (2011) argued that international experience was not a determinant of global mindset. They suggested that cultural intelligence is moderating if the international experience, for example, exposure to cross-cultural interactions, transforms into global mindset. Furthermore, global mindset is a dynamic concept (den Dekker, 2013) that might be stimulated. Our research findings promote the use of global mindset in interventions designed to enhance the well-being of third culture individuals. Such interventions could incorporate factors supporting the global mindset development, namely cross-cultural sensitivity, knowledge on global matters, inclusiveness, and active engagement in others' perspective-taking. It might reciprocally enhance self-efficacy and well-being for international students and hence positively reflect on their functioning in the multicultural environment of the UAE at the entry stage of their careers.

## Limitations

A few shortcomings need to be taken into consideration while interpreting our outcome. Firstly, the mediation model is highly dependent on the initial hypothesis, and hence, its power to infer the true causality is limited. Also, the sample was representative of only the specific, multicultural environment of the UAE, with the majority of Asian individuals; hence the findings may lack generalisability. Furthermore, the gender distribution was unequal, and this may have also impacted our results.

The cross-sectional model and self-reported measures could have also biased our results due to social desirability processes. We suggest that further research employ longitudinal designs to evaluate our hypothesis with other multicultural samples.

## Conclusion

Summing it up, our research has confirmed a prominent role of global mindset in supporting not only organisational success within a global context but also the well-being of individuals with multicultural identities. Furthermore, we have provided the first attempt to explain the mechanism of such an impact. Our findings highlighted a positive influence global mindset has on the level of general self-efficacy of TCKs, which in turn may boost their life satisfaction. Therefore, the present research fed into a better understanding of the mechanism of global mindset enhancing the well-being of cross-cultural individuals and hence donated to the postmodern psychological knowledge. In the global era, TCK individuals may constitute a population of the future; thus, accounting for the dynamic character of self-efficacy and global mindset, we further set a new field of exploration for possible interventions targeting TCKs' flourishing.

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### **Magdalena Mosanya**

Faculty Adjunct at the Psychology Department of Middlesex University and Murdoch University in Dubai, UAE. She is a doctoral candidate at the Institute of Psychology of the Polish Academy of Sciences and holds several master degrees in Psychology, Cultural Anthropology, and International Relations. She has been working in the multicultural environment of the United Arab Emirates for 12 years. Her research interests include cross-cultural communication, the well-being of multicultural individuals, and women empowerment.

e-mail:m.mosanya@mdx.ac.ae

ORCID 0000-0002-1131-3956

## 6.5. Study 5 – Exploring cultural intelligence relationships with a growth mindset, grit, coping and academic stress in the United Arab Emirates



### Exploring Cultural Intelligence Relationships with Growth Mindset, Grit, Coping and Academic Stress in the United Arab Emirates

Mosanya, M.

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**Abstract:** Positive psychology seeks to understand what factors contribute to wellbeing and success. Accordingly, the present study explored relationships between cultural intelligence and factors related to academic success, namely growth mindset and grit, as well as academic stress and constructive coping. It also aimed to compare levels of cultural intelligence between third culture individuals (TCI) and non-third culture individuals (non-TCI). Data were collected from 200 multicultural university students in the United Arab Emirates. The results of correlation analysis confirmed a significant positive relationship between cultural intelligence and markers of academic success (grit and growth mindset). Higher levels of cultural intelligence were characteristic of individuals with lower academic stress. Multiple regression analysis showed that only cultural intelligence of three academic success measures including grit and growth mindset, significantly predicted coping. Lastly, results of the independent sample t-test found no significant difference between TCI and non-TCI individuals, shedding new light on the process of acquisition of cultural intelligence. This study is an early contributor addressing the gap in understanding the role of cultural intelligence in multicultural academic settings.

ملخص البحث: يبحث علم النفس الإيجابي في فهم العوامل التي تشارك في النجاح والحياة الطيبة، وفي هذا السبيل، كشفت هذه الدراسة العلاقة بين الذكاء الثقافي والعوامل المتعلقة بالنجاح الأكاديمي، وعلى وجه التحديد، عقلية النمو والمثابرة، وكذلك الإرهاق الأكاديمي والتأقلم البناء. كما استهدفت هذه الدراسة المقارنة بين مستويات الذكاء الثقافي بين أفراد الثقافة الثالثة وآخرين لا ينتمون إلى ذات الثقافة، حيث جمعت البيانات من منتي طالب جامعي متعدد الثقافات في الإمارات العربية المتحدة. أكد تحليل الارتباط علاقة إيجابية ملحوظة بين الذكاء الثقافي وصنّاع النجاح الأكاديمي؛ أي عقلية النمو والمثابرة. وتبين أن الأشخاص ذوي مستويات الذكاء الاجتماعي الأعلى يتسمون بإرهاق أكاديمي أقل، وأظهر تحليل الانحدار المتعدد لثلاثة مقاييس نجاح أكاديمي، بما فيها عقلية النمو والمثابرة، قدرة كبيرة على التأقلم الإيجابي البناء. ختاماً، لم تُظهر نتائج (اختبار-ت) المستقل للمقارنة أي اختلاف ملحوظ بين أفراد ينتمون إلى الثقافة الثالثة وآخرين لا ينتمون إليها، ونكون بهذا قد ألقينا الضوء على منظور جديد لطريقة الحصول على الذكاء الثقافي. وتعتبر هذه الدراسة من الدراسات الأولى المعنوية بدم الفجوة بين فهم دور الذكاء الصناعي في صنع النجاح الأكاديمي متعدد الثقافات والذكاء الثقافي.

**Keywords:** cultural intelligence; third culture individuals; academic success; grit; growth mindset; positive psychology; United Arab Emirates

**About the Author:** Magdalena Mosanya is an adjunct faculty at the Psychology Department of Middlesex University Dubai. She is a doctoral candidate at the Polish Science Academy and holds



Master's degrees in Psychology, Cultural Anthropology and International Relations and Business. Magdalena has been working in the multicultural environment of the United Arab Emirates for 10 years, where she is also raising her multicultural family. Her research interests include cross-cultural communication and wellbeing of multicultural individuals, where she applies her combined expertise in psychology and cultural anthropology.

**Address correspondence to:** [magdalena@mosanya.net](mailto:magdalena@mosanya.net)

**Cultural intelligence or cultural quotient (CQ)** has been linked to success and performance in international environments ranging from business organizations to social institutions (Earley & Ang, 2003; Henderson, Stackman, & Lindekilde, 2018; Oolders, Chernyshenko, & Stark, 2008). It is also predicted to become the main contributor to the success of 21st century leaders (Benet-Martínez, 2012; Tarique & Takeuchi, 2008). Supporting social functioning, cultural intelligence feeds into the positive psychology approach, which is concerned with the factors that lead to well-being across relational, cultural and academic dimensions, among others (Seligman & Csikszentmihalyi, 2000). For individuals functioning in culturally diverse environments, the determination of such factors may be predictive of success, especially if these factors can be leveraged. Cultural intelligence, as the capability to bridge cultural differences, could constitute a practical framework for intercultural effectiveness within positive psychology (Ng, 2013).

As a result of globalization and technologization, cultural diversity and cross-cultural communication are becoming increasingly important. Despite a large interest in the field and the knowledge that leaders and individuals in global organizations require such cross-cultural skills (Ang et al., 2007; Osland, Divine, & Turner, 2015), little has been learned about how to facilitate cross-cultural relationships (Gelfand, Erez, & Aycan, 2007). Educational institutions, dedicated to fostering global leaders who will manage such diversity, are also becoming more multicultural (Bikson, Treverton, Moini, & Lindstrom, 2003; Osland, Bird, Mendenhall, & Osland, 2006). Possessing the knowledge and skills to facilitate communication between people of diverse origins seems essential to multicultural university student populations. Yet, such interactions are often hampered by implicit biases, prejudices, and barriers to dealing with diversity (Adler, 2002; Gelfand et al., 2007).

Thus, researching the ways in which cultural management skills like cultural intelligence can contribute to cross-cultural relationships is timely. Cultural intelligence, if related to academic success as a dispositional and dynamic quality, could be targeted through interventions and training models to improve the success and wellbeing of students in multicultural environments. It is suggested that those exposed to multicultural environments early in their development possess a higher level of dispositional cultural intelligence than those raised in a monocultural settings (Lovvorn & Chen, 2011); thus, a country like the United Arab Emirates (UAE), with an expatriate population approaching 89% (Global Media Insight, 2019), is ideal for the determination of such inquiry. Consequently, in this study we explore the relationships between cultural intelligence and academic success, defined by levels of grit and growth mindset, coping, and stress levels in multicultural students in the UAE.





### Third Culture Individuals

The term 'Third Culture Kid' was coined by Useem, Useem, and Donoghue (1963) and refers to individuals who spent a significant part of their developmental years outside their parent's home countries (Pollock & Van Reken, 2009) or their passport country (Moore & Barker, 2012). Those individuals can be termed as transcultural (Willis, Enloe, & Minoura, 1994), cultural hybrids, or global nomads (McCaig, 1992), nomenclature which brings attention to this fusion of multiple identities. Adult third culture individuals (TCIs) exist in the spaces in and between cultures and construct their identities around their relationships rather than geography (McLachlan, 2007). During adolescence, a period essential to identity development, TCIs tend to experience cultural stressors which may adversely impact identity coherence (Rumbaut, 2008), behavioral shifts, and acculturative stress (Pollock, Van Reken, & Pollock, 2017). They may face difficulty adjusting to adult life (Espinetti, 2011). Historically, TCI identity was regarded as a negative trait related to lower levels of psychological well-being, success, and identity integration (Schwartz, Zamboanga, Rodriguez, & Wang, 2007; Wertsch, 1991).

Yet, recent studies highlight TCI's abilities to integrate multiple cultural paradigms, which does not necessarily affect wellbeing (Berry, 1989, 2003; Nguyen & Benet-Martínez, 2013). Pollock and Van Reken (2009) further suggested that TCIs feel at home anywhere and develop new types of belonging. Likewise, individuals with multiple cultural backgrounds experience environmental changes with less distress due to their innate ability to adapt, as well as their openness, flexibility, and global mindset (Gupta & Govindarajan, 2002). TCIs are recognized to possess cross-cultural managerial predispositions (Lovvorn & Chen, 2011; Tarique & Takeuchi, 2008).

### Cultural Intelligence (CQ)

Culture, understood as a way of living and relating with others, consists of values, beliefs, meanings, conventions, and artifacts (Kitayama & Park, 2010). Cultural psychology assumes that culture and psychology are interrelated (Markus & Conner, 2013; Ratner, 2006), as attachments and commitments to the socio-cultural environment influence identity, thinking patterns, intelligence, and self-concept (Bandura, 1977). With a long tradition of studies on cross-cultural effectiveness and abilities (Smith & Bond, 1999; Thomas, 2002), some individuals might possess abilities to interact better within culturally diverse contexts (Caligiuri, 2000).

Among many approaches in the field of intelligence, the Interactional Theory of Intelligence seems the most relevant to this discussion (Earley & Ang, 2003; Kitayama, 2002). This theory defines intelligence as an adaptive interaction between an individual and their environment; thus, intelligence is conceptualized as dynamic (Ng & Earley, 2006) and multifaceted (Sternberg, Lautry, & Lubart, 2003). Subsequently, the concept of cultural intelligence or cultural quotient (CQ) is defined as a person's capability to adapt effectively to new cultural contexts and deal effectively with situations characterized by cultural diversity (Earley & Ang, 2003). Whilst exposure to more than one culture can result in stress, it also influences the development of intercultural competencies. Such competencies increase effectiveness in culturally diverse contexts and enhance the ability to regulate stress (Benet-Martínez, 2012). Individuals possessing natural abilities to



detect, understand, and manage the cultural characteristics of others can be described as culturally intelligent and competent (Oolders et al., 2008).

Another root to the concept of cultural intelligence is Sternberg and Detterman's (1986) multiple foci of intelligence framework, which includes metacognitive, cognitive, motivational, and behavioral dimensions. Metacognitive CQ relates to the awareness of diversity, the influence that culture has on one's behaviors and degree of abilities to revise one's cultural knowledge (Earley, Ang, & Tan, 2006; Brislin, Worthley, & MacNab, 2006). Cognitive CQ relates to the ability to recognize similarities and differences across cultures, as well as the knowledge of its norms and social systems. It is acquired through education and personal experience (Hofstede, 2001; Triandis, 1994). Motivational CQ reflects the capability and willingness to learn about others, called cross-cultural efficacy (Bandura, 2002), and a drive to function effectively in situations characterized by cultural diversity (Ang & Van Dyne, 2008; Ang et al., 2007). Finally, behavioral CQ reflects the ability to exert appropriate behaviors in culturally diverse contexts and display competence in cross-cultural interactions (Thomas, 2006). Cultural intelligence predicts adaptive behaviors and performance beyond other personality traits and qualities (Oolders et al., 2008; Sahin & Gurbuz, 2014).

#### **Growth Mindset**

The science of positive psychology allowed a new perspective on academic success (Laursen, 2015). This new approach highlighted, among others, the notions of grit and growth mindset as relevant measures of success and flourishing and alternatives to traditional performance assessments. Dweck (1999, 2007) identified two distinct ways in which individuals view learning. Those with a fixed mindset view intelligence as an inborn trait which, once established, cannot be altered. Individuals with a growth mindset believe that they can develop their intelligence over time (Blackwell, Trzesniewski, & Dweck, 2007). Growth mindset is related to achievement and can aid in stress reduction (Yeager et al., 2016). There have been successful attempts to increase learning abilities and decrease academic stress with the stimulation of growth mindset (Cohen & Sherman, 2014; Elliot & Dweck, 2005; Stipek, 2002). Growth mindset is therefore an evidenced factor facilitating academic success.

#### **Grit**

Grit is understood as the mental durability and perseverance used to strive towards goals and accomplishments (Drayton & Hammond, 2017; Duckworth, Peterson, Matthews, & Kelly, 2007). Positive relationships between student grit and determination, self-control, self-regulation and achievement have been identified in the literature (Duckworth et al., 2007). In line with a positive psychology perspective, and based on supportive evidence, it is possible to assume the importance of grit for students' achievement; it has consistently predicted success (Duckworth, 2016; Ivcevic & Brackett, 2014; Reed, Jeremiah, & Hammond, 2017). Further, Duckworth and Seligman (2005) found correlations between self-discipline and achievement to be twice as strong as that between IQ and achievement. Tomlinson (2013) also demonstrated a relationship between grit and creativeness.



### Coping

Students face many challenges in pursuit of their goals. When perceived as negative, challenges can increase academic stress and lead to conflict, which can have an adverse effect on student performance (Shaikh et al., 2004). When facing adversity and stress perceived to exceed existing resources, individuals develop coping strategies, i.e., cognitive and behavioral efforts to respond to specific demands or reduce internal or external stressors (Folkman & Lazarus, 1991). Coping strategies can be functional (called constructive) or dysfunctional. Constructive coping strategies (i.e., humor, emotional support, active coping, acceptance, religion) can effectively reduce stress levels, whereas dysfunctional or maladaptive coping (i.e., disengagement, denial, substance abuse, gambling, etc.) may further elevate it (Al-Dubai, Al-Naggar, Al-Shagga, & Rampal, 2011; Saxon et al., 2017). A constructive coping style mediates the relationship between academic stress and performance (Shaikh et al., 2004). Likewise, constructive coping is shown to be characteristic of students who are less often involved in conflicts (Ben-Ari & Hirshberg, 2009). Previous studies in the UAE have shown, for example, that many students used positive coping strategies such as praying, meditating, planning, and taking action to deal with conflict and stress (Elzubeir, Elzubeir, & Magzoud, 2010; Gomathi, Ahmed, & Sreedharan, 2013).

### Stress

Academic stress is defined as arousal in response to academic events (Alsulami et al., 2018). It is a process by which individuals perceive and cope with environmental threats and challenges and arises when a drain on the individual surpasses available resources (Folkman & Lazarus, 1991). In small amounts, stress is normal, yet prolonged academic stress can diminish academic performance and provoke maladaptive behaviors (Richlin-Klonsky & Hoe, 2003; Topper, 2007; Vermunt & Steensman, 2005). A negative relationship was found between health-related quality of life and stress of college students (Dusselier, Dunn, Wang, Shelley, & Whalen, 2005). Moreover, stress decreases the adjustment abilities of international students (Hussain, Kumar, & Husain, 2008). Studies found a high prevalence of stress among students in Arab countries (Al-Dabal, Koura, Rasheed, Al-Sowielem, & Makki, 2010; El-Gilany, Amr, & Hammad, 2008; Fawzy & Hamed, 2017). Interventions to enhance resources such as the development of a growth mindset and constructive coping can sustain stress at manageable levels and enhance wellbeing (Struthers, Perry, & Menec, 2000).

### The UAE as a Multicultural Student Hub

The prevalence of individuals with multicultural identities is growing (McDonald, 2010), especially in the United Arab Emirates (UAE). The ratio between expatriates living in the UAE and the local Emirati population is nearly 9 to 1 and the UAE has one of the largest international migrations in the world (GMI, 2019). After an accelerated period of urbanization and modernization over the last few decades, the social structure, standards of living, and habits of UAE residents have been radically transformed (Carter, Saadi, Reed, & Dunn, 2004). A flourishing economy attracts many nationalities, each of which brings their culture. Such cultural diversity creates a one-of-a-kind multicultural society, as there are no demands for assimilation with



the local Emirati culture (Chaudhary, 2016). According to the UNESCO Institute of Statistics (2015), the UAE has nearly 34,122 inbound tertiary students versus 7,719 outbound students. Many students in the UAE can be classified as TCIs as they spend their developmental years outside their home country and that of their parent's and are exposed to diverse cultural paradigms early on. While this may bring challenges relating to the development of identity (Pollock & Van Reken, 2009; Schaetti & Ramsey, 1999), it may also spur multicultural communication abilities (Lovvorn & Chen, 2011; Tarique & Takeuchi, 2008). These characteristics can serve as a developmental blueprint in an era of globalization, where culturally appropriate responses are developed and higher levels of cultural intelligence acquired (Earley & Ang, 2003).

### The Present Study

In line with previous research and as an expansion of present knowledge, this study aims to address the following. First, we propose that cultural intelligence (CQ) will be a measure of academic success, significantly correlating with other variables related to performance and academic flourishing, namely positive psychology notions of growth mindset and grit. Second, we explore whether CQ is related to lower levels of perceived academic stress. Third, it is suggested that out of academic success predictors (mindset, grit, and stress), CQ will be the strongest predictor of constructive coping. Finally, it is also of interest to determine whether there are differences between students classified as third culture individuals (TCI) and those raised in one culture with regards to levels of cultural intelligence.

### Method

#### Procedure

Ethical approval was granted by the Ethics Committee of Middlesex University, Dubai (UAE). The purpose of the study was explained to participants verbally and in written form. Each participant signed a consent form prior to the completion of questionnaires. The researcher addressed participants' queries and assured them of the confidential nature of the study, as well as their right to withdraw or not participate.

#### Participants

Participants included 200 international students recruited through convenience sampling from a local university campus, of which 87% were females. 66% identified as third culture individuals (TCI), having spent a significant part of their developmental years (under 18) outside their parent's country or their own (Pollock & Van Reken, 2009). Participants came from 33 countries, which were clustered into five groups; South Asian (66%), Arab (17%), Western (8%), African (7%), and Far Eastern (2%). The mean age was 21 years old ( $SD=5.98$ ). All participants were fluent in English, a requirement for university admission.

#### Variables and Measures

All scales were administered in English. To determine TCI, a demographic questionnaire was designed for the current study and consisted of questions enquiring about age, country of



origin, year of study at the university, and whether participants classified themselves as a third culture individual: "Please check YES if you have been raised in a culture other than your parents (or a culture of the country given on your passport) for a significant part (more than 1 year) of early years 6-18." This definition was formed based on the work of Uusem et al. (1963) and Pollock and Van Reken (2009) with added clarification of what was meant by "early developmental years".

Cultural intelligence was measured using the Cultural Intelligence Scale (CQS; Earley & Ang, 2003), which consists of 20 items across four factors. Each subscale is composed of items that measure the construct in a direct way. All items are closed questions scored on a 7-point Likert scale (1-Strongly disagree; 7- Strongly agree). The total score translates into CQ level. The CQS has been cross-validated by Ang et al. (2007) across diverse samples (e.g., Gozzoli & Gazzaroli, 2018). Examples of items include: "I enjoy living in cultures that are unfamiliar to me" and "I am confident that I can socialize with locals in a culture that is unfamiliar to me." The CQS Cronbach's alpha was  $\alpha = .86$ , assuring good internal reliability, and all four subscales of cultural intelligence scale were significantly correlated with one another.

Coping styles were measured through the Interpersonal Stress Coping Scale (ISCS; Kato, 2013), a 15-item scale consisting of three factors, namely Distancing Coping, Reassessing Coping and Constructive Coping. The current study used only the latter factor. Statements are scored on a 4-point Likert scale (0= Did not use; 3= Used a great deal). Participants indicate the most suitable strategy regarding conflicts and stress experiences: "Tried to avoid talking with the person" and "Decided not to have anything more to do with the person". The Cronbach's alpha of the scale in present study was .60.

Students' theories of intelligence, i.e., mindset, was measured using the 8-item Implicit Theories of Intelligence Scale (Dweck, 1999). The complete scale contains four incremental and four entity theory items and assesses general beliefs about the fixedness versus malleability of intelligence. The statements are scored on a 6-point Likert scale (1= Disagree a lot; 6= Agree a lot). Overall, research indicates that the scale displays good internal consistency ( $\alpha = .82$  to  $.97$ ) across samples and test-retest reliabilities at two weeks ( $\alpha = .80$  to  $.82$ ) (Dweck, Chiu, & Hong, 1995). Statements include: "No matter how much intelligence you have, you can always change it a good deal" and "I like my work best when I can do it really well without too much trouble." For the current study, Cronbach's alpha was .53, indicating sub-optimal internal reliability.

The Grit Scale (Duckworth & Quinn, 2009) measures trait-level perseverance and passion for long-term goals and consists of 12 items scored on a 5-point Likert scale (1= Very much like me; 5= Not at all like me). It has high internal consistency, test-retest stability, consensual validity with informant-report versions, and predictive validity for samples of American cadets and students (Duckworth & Quinn, 2009). Statements include: "New ideas and projects sometimes distract me from previous ones" and "Setbacks don't discourage me." For the present study, the Cronbach's alpha was good ( $\alpha = .74$ ) assuring the reliability of this instrument.

Finally, academic stress was measured using the University Student Stress Scale - Academic Stress Subscale (Burge, 2009) which consists of 7 items scored on a 5-point Likert scale (1=Not at all stressful; 5= Extremely stressful). Students were asked to indicate how stressful a range of



academic issues are for them. These included “Handling the academic workload” and “Studying for tests and exams”. For the present study, this scale’s Cronbach alpha was high ( $\alpha=.81$ ) evidencing reliability of the measure for the given sample.

### Results

Preliminary analyses were performed to ascertain normal distribution of the variables. Cultural intelligence, stress, and grit scales showed normal distribution. However, mindset and constructive coping were not normally distributed and directly performing a regression analysis on them would have increased the probability of Type I and Type II errors. Both variables were characterized as slightly skewed (Mindset = .43, ConCoping = .36). To enhance robustness of the analyses, these have been normalized with a log10 (see Sweet, Frontier, Strachan, Blanchard, & Boulay, 2014). Consequently, the transformations improved the distribution and it was possible to assume normal distributions.

#### Correlation analyses

The means, standard deviations and Pearson’s correlations of the total scores of each scale are presented in Table 1. All variables, namely cultural intelligence, growth mindset, constructive coping and grit significantly correlated with cultural intelligence. CQ was negatively associated with academic stress while CQ was positively correlated with growth mindset, grit, and constructive coping. In summary, correlational results suggested that a higher level of CQ was associated with lower stress among students and that it was characteristic of individuals who possess a higher level growth mindset, grit and constructive coping.

Table 1

*Descriptive statistics, skewness, kurtosis and correlations of CQ with stress, grit, constructive coping and growth mindset*

Variables	M (SD)	Skew	Kurtosis	1	2	3	4	5
1. Cultural Intelligence	99.54(18.57)	-.11	-.29	-	-.158**	.322**	.238**	.263**
2. Stress	21.70(5.63)	.05	-.62		-			-.245**
3. Grit	3.27(.53)	.30	.06		-.298**	-		
4. Constructive Coping	10.54(3.45)	-.36	-.60				-	.238**
5. Growth Mindset	1.47(.07)	.43	-.29			.268**		-
6. Age	21 (5.98)							

Note. \*\*  $p < 0.01$

#### Regression analysis

A multiple regression analysis was conducted to examine potential direct effects between academic success variables, i.e., cultural intelligence, mindset, grit and academic stress on



constructive coping. As seen in Table 2, cultural intelligence, mindset, grit and stress accounted for 13% of the variation in constructive coping, showing that the model as a whole has explanatory power ( $R^2 = .13$ ,  $F(4, 195) = 7.96$ ,  $p < .01$ ). Only cultural intelligence presented with predictive power for constructive coping  $\beta = .355$ ,  $t(199) = 4.92$ ,  $p < .01$ .

Table 2

*Multiple regression analyses of academic success variables (Cultural Intelligence, Grit, Mindset, Stress) on constructive coping*

Block	Predictor	Coping		
		Model fit	$\beta$	$t$
1	CQ	$R^2 = .13^{**}$	.35**	4.92
	Mindset	$F(4, 195) = 7.96^*$	-.06	-.87
	Grit		.10	1.35
	Stress		.05	.73

Note.  $R^2$  are adjusted for number of predictors  $\beta$  = standard regression coefficient \* =  $p < .05$ , \*\*  $p < .001$ .

#### Independent Sample T-Test

Before conducting comparison between groups, equality of variance was assessed by Levene's test ( $p > .05$ ). Results of the Independent Sample t-test indicated no significant differences between TCI ( $M = 100.66$ ,  $SD = 17.67$ ) and non-TCI ( $M = 97.39$ ,  $SD = 20.17$ ) in cultural intelligence, as  $t(198) = 1.17$ ,  $p > .05$ . Additionally, controlling for age and gender did not improve significance of grouping.

Table 3

*Independent sample t-test for differences between TCI and Non-TCI*

	TCK	Non-TCK	t-test
	Mean (SD)	Mean (SD)	
CQ	100.66(17.67)	97.39(20.17)	1.17 n.s.

Note. \* =  $p < .05$ , \*\*  $p < .001$ .

#### Discussion

The present research intended to show relationships of cultural intelligence with positive psychology notions of academic success for a multicultural sample of students living in UAE. The results confirmed our first hypothesis as CQ was positively correlated with a growth mindset. Our second hypothesis was also supported; cultural intelligence was significantly and positively correlated with grit. A negative association between CQ and stress levels was further confirmed.



Likewise, the regression analysis demonstrated the predictive power of cultural intelligence on constructive coping. All four hypotheses related to measures of academic success were supported. Previous research has similarly demonstrated that grit and growth mindset negatively relate with stress among students (Dweck, 1999, 2007; Reed et al., 2017); therefore, the positive relationship between the two former variables, as well as with cultural intelligence, suggests the position of CQ as a measure of academic success. It also highlights the facilitative role of cultural intelligence, within a positive psychology approach, in academic dimensions of wellbeing. Moreover, cultural intelligence, out of three academic success measures (including grit and growth mindset) was the only significant predictor of constructive coping.

Culturally intelligent individuals can deal with conflict and stress more effectively and therefore improve personal relationships which in turn might support wellbeing. These findings support the hypothesis of cultural intelligence as a possible correlate of academic success and determinant of student accomplishment in multicultural environments. Such results are also consistent with the literature on the role of CQ in success of global business organizations (Ramalu, Rose, Kumar, & Uli, 2010) and contribute to academic discourse by transferring the importance of CQ from business to the educational environment. It is believed that cultural intelligence can be developed (Lovvorn & Chen, 2011), hence it may be possible to intervene in this respect. Doing so may leverage CQ to stimulate academic success for students in international environments. Importantly, cultural intelligence may become a significant feature of positive psychology, similar to growth mindset, which can serve to support flourishing within multicultural populations. As positive psychology is concerned with wellbeing, cultural intelligence can be included in a wide spectrum of constructs supporting success, positive functioning and sustainable wellbeing of individuals in multicultural environment.

The fifth hypothesis, which stated that there would be significant differences in the level of cultural intelligence between TCI and non-TCI samples was nonetheless rejected. This finding is contrary to prior literature and sheds new light on TCI populations and their cross-cultural abilities (Greenholtz & Kim, 2009). It has been proposed that multinational corporations would seek to recruit people possessing TCI characteristics, rather than provide training in multicultural functioning and management (Tarique & Takeuchi, 2008). TCIs are regarded as better equipped for cross-cultural tasks and have greater dispositional global mindsets (Stokke, 2013; Tarique & Takeuchi, 2008). Yet, the current study did not confirm a higher level of cultural intelligence in TCIs compared to non-TCI residents in the UAE, a highly culturally diverse nation. As mentioned by the researchers who developed the TCK concept (Pollock & Van Reken, 2009), individuals need to spend their formative years outside their parents' country to be classified as 'third culture'. Perhaps to foster cross-cultural abilities and cultural intelligence, it is sufficient to spend time in a multicultural environment which lacks the presence of a dominant culture. In such environments, students may be encouraged to explore other cultures while sharing their own, what might result in leveraged levels of cultural intelligence. This may be the case for university students in the UAE; this unique environment may lead to the acquisition of multicultural abilities similar to those of TCIs. It might be concluded, that CQ does not depend on third culture experience and can be





nurtured via cross-cultural interactions (Kolb & Kolb, 2005; Ng, Van Dyne, & Ang, 2009). As a result, the verification of this last hypothesis has set a new direction for future exploration.

Consequently, the TCI construct might not be the best fit when choosing the future leaders of a multicultural world as proposed by Tarique and Takeuchi (2008). The present research suggests that cultural intelligence does not require 'traditional' TCI experience, in which cosmopolitanism is fostered during childhood (Cho, 2009). Perhaps a global mindset, defined by Gupta and Govindarajan (2002) as one that combines openness to, and awareness of, diversity across cultures, can be developed along with CQ during a shorter time, via exposure to a cross-cultural environment, rather than solely through spending one's formative years in a new culture. There might be value in designing multicultural educational hubs like in the UAE, a country where students live, work, and study alongside more than 190 nationalities with no pressing need to assimilate. Further research on CQ acquisition and learning is recommended.

Finally, this finding challenges existing definitions of what makes individuals third culture persons. The notion of TCIs has not been yet fully explored and there are inconsistent perspectives, which require critiques and clarification (see Dillon & Ali, 2019). For example, there is no clear distinction between TCI and multiculturalism and it might be that the focus on the developmental years during which TCI identity is considered to be acquired is too narrow and exclusive. This could have affected the non-significant results between TCIs and non-TCIs.

#### Limitations and Future Directions

Limitations were identified with respect to the self-reported character of scales, uniqueness of sample and skewedness of distribution. All questionnaires were self-report measures which may have generated biased results due to participants' tendency to report wishful answers instead of real psychological states (Demetriou et al., 2015). However, the aim of the present study was also to explore possible directions for further research in the form of longitudinal or experimental studies which might generate unbiased results. Second, our results might only be true for the unique sample of the UAE-based international students characterized by a lack of need to culturally assimilate, limiting generalizability of the findings and possibly influencing skewedness of distribution.

Two variables, namely mindset and constructive coping, were also slightly skewed. Skewed data arises naturally in various situations. The reason behind positive skew, as in case of growth mindset, might be that few individuals with very high scores affected the mean. Reversely, constructive coping was negatively skewed suggesting that most of the sample have scored very high with few very low outliers. A possible explanation is that in such diverse populations with various cultural paradigms, coping abilities and growth mindset inclinations might be influenced by contradictory cultural values causing polarization of distribution. For example, significant differences in the theory of intelligence are noticed depending of the culture of origin (Mercer & Ryan, 2009). Thus, future studies should explore the impact of culture of origin or length of stay in multicultural environments on growth mindset, cultural intelligence and constructive coping. Nevertheless, these limitations do not undermine the significance of the outcome, which



contributes to a deeper comprehension of cross-cultural academic success and the role of cultural intelligence, within a positive psychology approach.

We offer several future directions. As there was no significant difference in level of cultural intelligence between third culture children and non-TCI, unlike those shown in previous studies (Tarique & Takeuchi, 2008), replication of this research on different samples is recommended. Such validation could clarify whether the specific character of the multicultural student population in the UAE could result in an increase in CQ in non-TCI students through social interactions (Bandura, 1977; Kolb & Kolb, 2005; Ng et al., 2009). Research on the cultural intelligence acquisition model is also recommended, especially in culturally diverse societies. Future studies can explore not only the innate abilities of TCIs as global leaders, but the potential to teach cross-cultural skills within multicultural environments which lack a dominant culture. Other constructs might better explain the relationships between cultural intelligence and academic success measures and we recommend expanding the model to include mediating and moderating variables as well. For example, self-monitoring could explain the change brought by CQ in constructive coping (Renner, Laux, Shuetz, & Tedeshi, 2004). Research on the potential impact of multicultural identity integration on academic success and the role of CQ in forming multicultural identity is recommended (Benet-Martínez, 2012; Tadmor, Galinsky, & Maddux, 2012), as is the revision of the TCI concept definition to match a 21st century globalization and migration context. Lyttle, Barker and Cornwell (2011) showed that while length of exposure is primary to TCI identity development, the type of cultural environment might also play an important role in forming TCI, even later in life, with no limitation to developmental years.

#### Conclusion

This study shed light on the importance of cultural intelligence as a contributor to success, by extending the concept from a business context to an academic environment. Secondly, as positive psychology seeks to understand what factors contribute to wellbeing and success, the current research offers promise for the concept of cultural intelligence, which might constitute such a factor for multicultural student populations. It also offers an early contribution to fill the gap concerning cultural intelligence in a multicultural academic environment, with the CQS scale showing promising results. This exploratory research intended to discover relationships between cultural intelligence and grit, growth mindset and coping in a multicultural sample of students living in the UAE. The results confirmed significant correlations of CQ with grit and growth mindset as well as CQ's predictive influence over constructive coping. Secondly, higher level of CQ was shown to be characteristic of individuals with lower academic stress. Thirdly, new light was shed over the process of acquisition of cultural intelligence, as no differences between TCI and non-TCI was identified. In conclusion, the present study highlighted the importance of the notion of cultural intelligence in academic success in multinational environments and challenged previous assumptions about TCI students' dispositional character of cultural intelligence. By using a positive psychology lens, it is possible to understand how to better support and nurture student success and adjustment in growing multicultural contexts worldwide.



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## 7. Authors credit statements

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Signatures:

Magdalena Mosanya



Anna Kwiatkowska



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CRediT authors statement

**Magdalena Mosanya 70%:** Conceptualization, Investigation, Methodology, Writing-Original Draft Preparation, Writing - Editing, Resources, Software, Validation

**Anna Kwiatkowska 30%:** Data Curation, Methodology, Supervision, Visualization, Validation, Writing- Reviewing

Signatures:

Magdalena Mosanya



Anna Kwiatkowska



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**Anna Kwiatkowska 30%:** Data Curation, Methodology, Supervision, Visualization, Validation, Writing- Reviewing

Signatures:

Magdalena Mosanya



Anna Kwiatkowska

