



Exploring the Role of Character Strengths in the Endorsement of Gender Equality and Pro-Environmental Action in the UAE

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Abstract: Recently, there has been new energy focused on the role of positive psychology in contributing to the UN Sustainable Development Goals (SDGs). In this study, we explore whether people's best qualities or character strengths can and should be leveraged to increase endorsement of the SDGs of gender equality and environmentalism. Findings from this pilot study with a primarily female sample from the United Arab Emirates (UAE) shows that many character strengths were associated with patriarchal attitudes and not associated with support for gender equality in general. However, several character strengths were associated with support for specific issues such as stopping gender-based violence and support of women's work and leadership. Many character strengths were also associated with both pro-environmental attitudes and actions. Thus, this study offers a nuanced picture that points to when character strengths may be leveraged to support SDGs and when not.

المخلص: في الأونة الأخيرة ، كانت هناك طاقة جديدة تركز على دور علم النفس الإيجابي في المساهمة في أهداف التنمية المستدامة للأمم المتحدة (SDGs). في هذه الدراسة ، نستكشف ما إذا كان ينبغي الاستفادة من أفضل الصفات الشخصية أو نقاط القوة لدى الأشخاص لزيادة تأييد أهداف التنمية المستدامة للمساواة بين الجنسين وحماية البيئة. أظهرت النتائج المستخلصة من هذه الدراسة التجريبية علي عينة من الإناث من الإمارات العربية المتحدة أن العديد من نقاط القوة في الشخصية كانت مرتبطة بالمعاملة الوالدية ولم ترتبط بدعم المساواة بين الجنسين بشكل عام. ومع ذلك، ارتبطت العديد من نقاط القوة في الشخصية بدعم قضايا محددة مثل وقف العنف القائم على النوع الاجتماعي ومساندتها عمل المرأة وتوليها القيادة. ارتبطت العديد من نقاط القوة في الشخصية أيضاً بكل من المواقف والإجراءات المؤيدة للبيئة. وبالتالي ، قدمت هذه الدراسة صورة دقيقة أشارت إلى متى يمكن الاستفادة من نقاط القوة في الشخصية لدعم أهداف التنمية المستدامة ومتى لا يتم ذلك.

Keywords: character strengths; gender equality; pro-environmental action; SDGs; United Arab Emirates

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In the last five years, there have been multiple calls for positive psychology research to focus on improving collective wellbeing in society (e.g., Lomas et al., 2020; Waters et al., 2021). The United



Nations Sustainable Development Goals (SDGs) offer a useful framework for the systematic development of collective wellbeing (Deneve & Sachs, 2020; Lambert et al., 2020). The 2020 World Happiness Report (De Neve & Sachs, 2020) showed strong links between the national attainment of SDGs and the life satisfaction of citizens, reinforcing that their attainment is not only morally desirable, but also impactful for national wellbeing. Further, the SDGs are relevant for positive psychology because while they were derived from pressing social, economic, and material needs, they were also designed to improve the quality of life at the individual, collective and societal levels (Audette et al., 2018; Tapia-Fonllem et al., 2017; Umar et al., 2020). Among the SDGs, two have gained particular prominence in the Middle East/North Africa (MENA) region, where low rainfall and extreme heat place climate change as the most in need of attention, and the most negatively correlated SDG with wellbeing (Luomi et al., 2019). Gender inequality is another grand challenge that also has one of the strongest negative links with wellbeing in the region (Luomi et al., 2019).

As researchers in positive psychology focus on wellbeing as their main objective, broadening their remit to include the SDGs is a priority (Han & Barnett-Loro, 2018). However, there is little research on how to harness positive psychological action around the SDGs (Wamue-Ngare et al., 2021), especially from the Arab world. The United Arab Emirates (UAE) is committed to working toward the SDGs; but, a recent analysis of their trajectory vis-à-vis upcoming targets revealed slow improvement and that “none of the goals are on track to be achieved by 2030” (Umar et al., 2020, p. 26). With much SDG-related activity focused on top-down policy development, government implementation, and organizational initiatives, policymakers do not often consider how or what may drive individuals to both support the SDGs in principle and take concrete actions to advance them.

Previous inquiry on the factors that drive sustainable development has shown that certain personality traits are associated with greater support for such issues. Traits like openness to experience, creativity, aesthetic appreciation, inquisitiveness, honesty, and agreeableness have been associated with pro-environmental actions (Markowitz et al., 2012; Pavalache-Ilie & Cazan, 2018). Recently, a meta-analysis (Soutter et al., 2020) of 38 studies identified openness and honesty-humility as being most strongly correlated with pro-environmental attitudes and actions, and to a lesser extent, agreeableness, conscientiousness, and extraversion. Further, agreeableness and conscientiousness, alongside honesty-humility have been linked with being a ‘good’ citizen (Ashton & Lee, 2009). Far less inquiry has considered personality correlates specifically for gender equality support. Yet, research has examined predictors of gender attitudes and prejudice that in turn, would be expected to influence support for gender equality. Among these, findings mimic those found for pro-environmental action. A meta-analytic review of 71 studies in personality research shows that openness to experience, conscientiousness, and agreeableness are positively correlated with attitudes aligned with gender equality (Sibley & Duckitt, 2008; also see Crawford & Brandt, 2019).

Studies examining personality traits and character strengths suggest significant overlap, however, these are still considered distinct constructs (e.g., Dametto & Noronha, 2021; Littman-Ovadia & Lavy, 2012; Nofle et al., 2011; Noronha & Campos, 2018). Hence, an extension of this scholarship is the identification of character strengths in relation to sustainable development (including climate action and gender equality) as an area ripe for urgent exploration towards some of the globe’s most pressing issues (Mayerson, 2020; Niemiec & Pearce, 2021). Save for very few studies specifically exploring the role of character strengths and pro-environmental action (i.e., Corral-Verdugo et al.,



2015; Moeller & Shahlmann, 2019), positive psychology, focused on scientifically leveraging people's best qualities, has largely ignored the potential to contribute to these efforts and boost the involvement of individuals, groups, and institutions (Ronen & Kerret, 2020).

Accordingly, we focus on two of the SDGs, namely, Goal 5 of gender equality and Goal 13 around climate action and seek to understand what character strengths are associated with individuals' likelihood to be inspired to serve as active contributors towards their fulfilment. Simply, do character strengths influence individual support for sustainable development policies that benefit others, as well as the planet? If so, which character strengths are most strongly associated with the endorsement of gender equality and climate action?

Gender Equality, Climate Action & Character Strengths: Definitions and Core Issues

Gender Equality

Gender equality refers to the “equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not mean that women and men will become the same but that women's and men's rights, responsibilities and opportunities will not depend on whether they are born male or female” (UN Women, n.d.). Gender equality is a human right yet, its absence remains a global issue (Goldbach et al., 2015; Shannon et al., 2019), that affects women, as well as children, organizations, and societies (George et al., 2016; Kosakowska-Berezecka, 2020; Roseboom, 2020; Shannon et al., 2019). When gender equality is absent, women are more likely to suffer from poverty, violence, poor nutrition, and mental health issues, and consequently, their children fail to reach their developmental potential (Roseboom, 2020). Gender inequality renders health risks more likely via discriminatory values, norms, beliefs, and practices, as well as differential exposures and susceptibilities to disease, disability, and injuries (Shannon et al., 2019).

Further, in many countries, although organizations have increased the number of women they hire, women disproportionately occupy lower-paid and lower-status jobs and are not equally represented in leadership positions (Shannon et al., 2019). Franco et al. (2020) found that limiting factors include discrimination, traditional gender roles, a lack of support from governments, few models or mentors, tension between family and professional demands, as well as unpaid care and domestic duties (Solomon et al., 2021). The COVID-19 pandemic has further exacerbated inequities (Fortier, 2020; Warren & Bordoloi, 2020), such that women are most affected by its economic effects (Madgavkar et al., 2020) as well as more prone to violence. Nearly one in four women reported domestic violence annually, but the pandemic increased cases by as much as 33% in some countries (Boserup et al., 2020). Despite global successes in recent decades, attaining equality for women and girls remains a priority, and given setbacks owing to the pandemic, there may be even further to go in reaching parity, with higher stakes along the way. Reversing these losses and maintaining progress towards equality requires the support of everyday individuals.

Climate Change

Climate change is affecting livelihoods across the globe in the form of air pollution, rising sea levels, storm surges, heat stress, wildfires, drought, flooding, and extreme precipitation (Solomon et al., 2021). According to the recent report released by the Intergovernmental Panel on Climate Change



(IPCC), the UN body overseeing the science of climate change, global warming has increased temperatures by 0.1 degrees Celsius between 1850 and 1900, but from 2011 to 2020 alone, rose by 1.09 degrees Celsius. The years 2016 to 2020 represent the hottest five-year period since 1850, currently placing the globe in a precipitous path toward a 1.5 degrees Celsius rise by 2025, an estimate far earlier than predicted. Immediate, rapid, and large-scaled reductions in greenhouse gas emissions are needed from industry and governments, given that human actions underscored by attitudes and support for global efforts still have the potential to determine the future course of climate change in the coming years (IPCC, 2021). Collectively, we must change our attitudes, lifestyles and consumption practices and replace anti-ecological tendencies with pro-environmental and pro-social behaviours (Corral-Verdugo et al., 2015) if humanity is to withstand the coming changes and have any future chances of reversing or at least stabilizing climate change.

Several lines of inquiry investigate human involvement in climate action. For example, pro-environmental action includes a range of behaviours aimed at mitigating or preventing harm towards nature, but can also include promoting nature's growth and integrity (Lange & DeWitte, 2019; Steg & Vlek, 2009). Such actions can be taken in private (i.e., reducing one's water use, driving less), or in the public domain, such as participating in broader ecological movements (Hadler & Haller, 2011). Environmentally sustainable behaviour involves broader actions targeted towards the protection of the socio-physical context, which includes those of a pro-ecological, altruistic, economically frugal, and equitable nature (Corral-Verdugo et al., 2015). Pro-environmental attitudes include the degree to which one favours or has a proclivity for the natural environment and can be signalled via intentions, awareness, connection to nature, or identification as an environmentalist (Lange & Dewitte, 2019). These are mere examples of constructs under continued development, which serve to illustrate the breadth of scholarship on environmentalism (Lange & De Witte, 2019).

Character Strengths

Character strengths are morally valued aspects of personality that help individuals succeed in important goals and can be thought of as positive traits or psychological identities by which individuals are most accurately known (Harzer & Ruch, 2015; Littman-Ovadia et al., 2014; McGrath, 2015; Park & Peterson, 2009). Strengths are embodied actions, thoughts, feelings, and responses, which can be socially rewarded, learned, and amplified in the right conditions. A total of 24 strengths has been identified as universally shared and represented globally (McGrath, 2015; Peterson & Seligman, 2004). They empower and guide individuals to engage in behaviours that benefit themselves and others (Lerner, 2005; Mayerson, 2020) and are often formed at an early age. For example, at the age of two, many children show kindness. As toddlers begin to learn language, they demonstrate concern with issues of fairness and justice. More sophisticated character strengths such as open-mindedness, forgiveness, spirituality develop during adolescence (Park & Peterson, 2006). Character strengths give meaning to people's thoughts and beliefs, as well as enhance a sense of wellbeing and happiness (Fouracres, 2020; Park & Peterson, 2006). Strengths like gratitude and future-mindedness influence social contribution, including civic action and community service (Lerner et al., 2014; Oosterhoff et al., 2021), and when these strengths are identified and explicitly used, more moral behaviour is observed (Ruch et al., 2017). As strengths are predisposing assets, their links to action makes them important.



Linking Character Strengths with Gender Equality, Environmentalism & Flourishing

While gender equality and climate action are pressing issues, there are few studies examining the role of character strengths in influencing them within the positive psychology literature. The closest parallel is the examination of character strengths in connection with civic action (Lerner et al., 2014), with its various forms being potentially relevant for energizing support for gender equality and pro-environmentalism.

Clark et al. (2017) operationalize progressivism as the degree to which an individual endorses the moral foundations of Harm/Care and Fairness/Reciprocity, which are most closely aligned with the character strengths of kindness and fairness and found that progressivism is associated with greater prosocial action. Oosterhoff et al. (2021) found significant positive correlations between civic action and a sense of purpose (often aligned with spirituality), future-mindedness (aligned with hope), and gratitude. While Corral-Verdugo et al. (2014) found all character strengths to be associated with sustainable behaviour, appreciation of beauty, perspective, self-regulation and creativity were the most strongly correlated. Warren and Coghlan (2016) also identified self-regulation, judgement, kindness, integrity, bravery, citizenship, perspective, prudence, zest, social intelligence, and spirituality as influencers of pro-environmental attitude or action. Lastly, Moeller and Stahlmann (2019) identified leadership and zest to be most strongly linked with environmental self-efficacy, while kindness, humility, prudence, fairness, and forgiveness were also, but to a lesser degree. We found no studies that analyze which character strengths influence gender equality directly. Our current study explores which, if any, of the 24 strengths have an influence on support for gender equality and environmentalism.

Engaging in civic action is in turn associated with flourishing. For instance, civic action among youth predicts basic psychological needs satisfaction (e.g., autonomy, competence, relatedness) which in turn predicts their wellbeing (Wray-Lake et al., 2019). Further, civic engagement creates a virtuous cycle such that it is associated with psychosocial wellbeing (Flanagan & Bundick, 2011) which further reinforces civic engagement (Son & Lin, 2008). These links hold in the context of civic action for gender equality and environmentalism as well. Pursuit of gender equality has been shown to lead to greater subjective well-being through improving the actor's freedom of choice and personal autonomy (Audette et al., 2018). Similarly, pro-environmental behaviours are associated with greater satisfaction, intrinsic motivation, and happiness (Brown & Kasser, 2005; De Young, 2000). Overall, the sustainable development goals highlight the importance of meeting present and future human needs, creating the space for a focus on individual and collective well-being. A pro-sustainable relationship with the socio-physical environment results in the satisfaction of human needs, which increases well-being (Tapias-Fonllem et al., 2017). Broadly, engaging in civic action demonstrates positive psychological benefits for individuals (Wray-Lake et al., 2019) and community health, economies, governments, and societies alike (Flanagan & Christens, 2011).

The Present Study

Based on past research, we predicted that some character strengths such as kindness, fairness, hope, gratitude, and spirituality would more likely be positively associated with supportive attitudes and behaviours relevant to gender equality and environmentalism. However, given that there is little



past research that specifically examines the links between character strengths and gender equality or environmentalism, we also sought to explore which other character strengths might be associated. Finally, we predicted that support for gender equality and environmentalism would be associated with flourishing. As a supplementary analysis, we also considered whether character strengths predicted intentions to seek out knowledge about gender equality and environmentalism, which could enable future shifts in attitudes, and consequently policy-supportive behaviour.

Method

Participants

A total of 70 participants completed an online survey (91% female, $n = 64$, 4% male, $n = 3$, 1% non-binary, $n = 1$). The age of participants ranged from 17 to 34 with an average age of 19.6 years old. All participants were Emirati national students at a university in the UAE.

Procedures

Participants were recruited through their university, where ethics approval, including informed consent from participants was obtained. Each participant completed an online Qualtrics survey, first self-reporting character strengths essential to them. Next, they responded to scales measuring their attitudes toward gender equality and environmentalism, as well as their support of gender equality and environmentalism behaviours. A flourishing scale was also included. Two attention check items that have been previously used (e.g., Warren, Sekhon, Winkelmann et al., 2021; Warren, Sekhon, & Waldrop, 2021) were placed in the survey to ensure participants read the questions carefully. The total survey time took approximately 20-30 minutes.

Measures

Participants were asked to answer questions covering a range of demographic information including nationality, age, gender, religion, marital status, and employment status. The surveys were presented in English, the primary language of instruction.

The Signature Strengths Survey (McGrath, 2017). This 24-item scale identifies which of the 24 strengths individuals most strongly identify as being an essential part of their person. It is used as a proxy to the longer, original 120-item survey of the same nature. Items (e.g., “creativity: you are viewed as a creative person; you see, do, and/or create thing that are of use; you think of unique ways to solve problems and be productive”) are self-rated by how they identify with the characteristic on a 1 (strongly disagree) to 7 (strongly agree) scale.

Patriarchal Gender Attitudes. Drawing from other scales, we created a scale to assess gender attitudes. Constantin and Voicu (2014) reviewed measures of individuals’ attitudes toward different aspects of gender equality and their attitudes toward working women, domestic work, and a woman’s position in the family relative to a man’s position. They considered cross-cultural gender surveys, including the World Values Survey and European Values Survey. Based on this, a local researcher from the UAE reviewed items for fit with the local cultural context and deemed six items from the International Social Survey Program and one item from the European Values Survey as most relevant for the UAE context. Relevance was determined based on fit with the social culture (e.g., items with sexual content such as sexual assault were dropped) and societal structure (i.e., given that UAE has a



monarchy, items on voting or campaigning were dropped). The items in the scale all represent patriarchal gender attitudes, for example: “All in all, family life suffers when the woman has a full-time job.” All items were measured on a 1 (strongly disagree) to 7 (strongly agree) scale.

Support of Gender Equality in Principle. Nine items assessing the degree to which participants endorsed the principle of gender equality were included. As there are no measures that capture this construct, the authors developed items based on the definitions and descriptions of the SDGs. Participants recorded the extent to which they agree or support these ideas. Examples of items include “I support ending discrimination against all women and girls everywhere” and “I support women who want to work outside the home and achieve their work goals.” Participants used a 7-point scale (1 = Strongly disagree to 7 = Strongly agree) to indicate their responses.

Environmental Concern (ISSP; ISSP Research Group, 2012). Five items that measured the extent to which participants perceived climate change to be of concern were included. Items (e.g., “air pollution caused by cars” and “the rise in the world temperature caused by climate change”) were measured using a 5-point scale (1 = Not dangerous at all to 5 = Extremely dangerous).

Support for Environmentalism. Five items were used to assess support for environmental actions and laws. As there are no measures that capture this construct, the authors developed items based on the definitions and descriptions of the SDGs. Participants were asked to record the extent to which they agree/support these ideas. Examples of items include “I support policies (e.g., laws) that protect the environment” and “I support schools integrating education on climate change and environmental actions in the classroom.” The items were measured using a 7-point scale (1 = Strongly disagree to 7 = Strongly agree).

Flourishing (Diener et al., 2009). This 8-item measure of social psychological prosperity includes having a sense of competence, meaning, optimism, feeling engaged and interested, as well as having supportive relationships, contributing to the wellbeing of others, being respected, and accepting the self. Items (e.g., “I lead a purposeful and meaningful life” and “My social relationships are supportive and rewarding”) are rated on a 1 (strongly disagree) to 7 (strongly agree) scale.

Results

The data was screened to remove missing data, which resulted in a final sample size of 68 participants. To test the hypotheses, we split the items from the support for gender equality measure into three sub-measures: support of patriarchal behaviours ($\alpha = .956$), support to stop gender-based violence (GBV) ($\alpha = .911$), and support for women’s work and leadership ($\alpha = .946$). Bivariate correlation analysis revealed that a range of character strengths were significantly associated with support of patriarchal behaviours ($p < .05$, $r = .252$ to $.417$), support to stop GBV ($p < .05$, $r = .279$ to $.383$), and support for women’s work and leadership ($p < .05$, $r = .246$ to $.419$). It was surprising that many character strengths were found to be positively associated with patriarchal attitudes as it was contrary to our anticipated hypothesis. We further examined its interrelationships with other attitudinal measures. Support for women’s work and leadership, patriarchal attitudes, and support to stop gender-based violence were positively and very strongly correlated: support for women’s work and leadership and patriarchal attitudes ($r = .958^{**}$); support for women’s work and leadership and support to stop gender-based violence ($r = .888^*$); patriarchal attitudes and support to stop gender-based violence ($r = .958^{**}$).



Table 1

Character strengths and their correlations with gender equality and environmentalism variables

<i>Patriarchal gender attitudes</i>	<i>Environmental concern</i>	<i>Support for environmentalism</i>	<i>Support of patriarchal behaviours</i>	<i>Support to stop GBV</i>	<i>Support for women's work & leadership</i>
<i>Honesty</i>	Humility/ Modesty	Love	Honesty	Honesty	Love
<i>Love</i>		Kindness	Love	Love	Kindness
<i>Kindness</i>		Fairness	Kindness	Kindness	Social Intelligence
<i>Social Intelligence</i>		Leadership	Fairness	Fairness	Fairness
<i>Fairness</i>		Appreciation of Beauty & Excellence	Forgiveness/ Mercy	Appreciation of Beauty & Excellence	Appreciation of Beauty & Excellence
<i>Humility/Modesty</i>		Gratitude	Humility/ Modesty	Gratitude	Gratitude
<i>Appreciation of beauty & excellence</i>		Hope	Appreciation of Beauty & Excellence	Spirituality/ Sense of Meaning	Hope
<i>Gratitude</i>		Humor	Gratitude		Humor
<i>Humor</i>		Spirituality/ Sense of Meaning	Hope		Spirituality/ Sense of Meaning
<i>Spirituality/Sense of Meaning</i>			Humor		
				Spirituality/ Sense of Meaning	

Note: The associations are all statistically significant ($p < .05$).

To gain a more fine-grained understanding of particular character strengths that matter, we performed a bivariate correlational analysis for each character strength's association with patriarchal gender attitudes: honesty ($r = .258^*$), love ($r = .388^{**}$), kindness ($r = .330^{**}$), social intelligence ($r = .252^*$), fairness ($r = .420^{**}$), humility/modesty ($r = .250^*$), appreciation of beauty and excellence ($r = .370^{**}$), gratitude ($r = .309^*$), humor ($r = .265^*$), spirituality/sense of meaning ($r = .278^*$); environmental concern: humility/modesty ($r = .304^*$); support for environmentalism: love ($r = .377^{**}$),



kindness ($r = .391^{**}$), fairness ($r = .404^{**}$), leadership ($r = .244^*$), appreciation of beauty and excellence ($r = .207^*$), gratitude ($r = .318^{**}$), hope ($r = .338^{**}$), humor ($r = .344^{**}$), spirituality/sense of meaning ($r = .287^*$); support of patriarchal behaviours: honesty ($r = .272^*$), love ($r = .417^{**}$), kindness ($r = .357^{**}$), fairness ($r = .414^{**}$), humility/modesty ($r = .252^*$), appreciation of beauty and excellence ($r = .351^{**}$), gratitude ($r = .342^{**}$), hope ($r = .261^*$), humor ($r = .296^*$), spirituality/sense of meaning ($r = .315^{**}$); support to stop GBV: honesty ($r = .279^*$), love ($r = .348^{**}$), kindness ($r = .322^{**}$), fairness ($r = .383^{**}$), appreciation of beauty and excellence ($r = .289^*$), gratitude ($r = .290^*$), spirituality/sense of meaning ($r = .298^*$); and support for women's work and leadership: love ($r = .419^{**}$), kindness ($r = .314^{**}$), social intelligence ($r = .252^*$), fairness ($r = .422$), appreciation of beauty and excellence ($r = .389^{**}$), gratitude ($r = .313^{**}$), hope ($r = .251^*$), humor ($r = .316$), spirituality/sense of meaning ($r = .246^*$). Table 1 shows all the character strengths correlated with each measure. Eleven strengths were not correlated with any of the measurements: bravery/courage/perseverance, creativity, curiosity, judgement/critical thinking, love of learning, perspective/wisdom, self-regulation, forgiveness/mercy, teamwork, zest, and prudence.

Finally, it is relevant to consider whether supporting gender equality and environmentalism were associated with flourishing. Findings revealed moderate associations between support for gender equality and flourishing ($r = .248^*$) and support for environmentalism and flourishing ($r = .406^{**}$). We further examined the relationship between our three subscales of gender equality and flourishing. The data show that support for women's work and leadership ($r = .245^*$) and surprisingly, support of patriarchal behaviours ($r = .243^*$) were positively correlated with flourishing. Support to stop gender-based violence was not correlated with flourishing ($r = .238$, *ns*).

Discussion

Our results partially supported our hypotheses. Most character strengths (barring humility and modesty) were not associated with environmental concern (i.e., they did not consider environmental issues to be dangerous), yet, they were associated with support for environmentally-relevant behaviours, from individual actions such as recycling to policy support like students being taught about climate change. Given that support for environmentalism is influenced by character strengths in the UAE, targeting character strengths to increase environmental behaviours could be a useful strategy. Contrary to our hypothesis, most character strengths were positively associated with support for patriarchal behaviours. This suggests that in the UAE, an individual's best qualities are associated with reinforcing and endorsing patriarchal attitudes and behaviours. Thus, attempting to shift patriarchal attitudes by highlighting character strengths may not be useful. Interestingly, this sample was primarily female, suggesting that women in the UAE may associate desirable character strengths with patriarchal attitudes. However, character strengths were also associated with support to stop gender-based violence and support for women's work and leadership. Thus, using character strengths to influence support in these specific areas of gender equality could yet be effective.

The evaluation of which character strengths are correlated with patriarchal gender attitudes (honesty, love, kindness, social intelligence, fairness, humility/modesty, appreciation of beauty and excellence, gratitude, humor, spirituality/sense of meaning), support of patriarchal behaviors (honesty, love, kindness, fairness, forgiveness/mercy, humility/modesty, appreciation of beauty and excellence, gratitude, hope, humor, spirituality/sense of meaning), support to stop GBV (honesty, love, kindness,



fairness, appreciation of beauty and excellence, gratitude, spirituality/sense of meaning), support for women's work and leadership (love, kindness, social intelligence, fairness, appreciation of beauty and excellence, gratitude, hope, humor, spirituality/sense of meaning), environmental concern (humility/modesty) and support for environmentalism (love, kindness, fairness, leadership, appreciation of beauty and excellence, gratitude, hope, humor, spirituality/sense of meaning), point us in the direction of which character strengths can help influence these attitudes/actions. This can be accomplished by centering the conversation about progressive topics (i.e., gender equality and environmentalism) around the character strengths they are associated with. This might be a fruitful approach, because character strengths are viewed as moral (McGrath, 2015). Once the language around progressive topics are focused on character strengths, people may be intrinsically motivated to support these topics in order to identify with those character strengths (Mayerson, 2015).

Further, eleven strengths were not correlated with any of these social attitudes or behaviours (bravery/courage/perseverance, creativity, curiosity, judgement/critical thinking, love of learning, perspective/wisdom, self-regulation, teamwork, forgiveness/mercy, prudence, zest). The lack of associations with some of these character strengths such as teamwork or zest are unsurprising. Yet, in cultures where gender equality and environmentalism are pursued through demonstrations, grassroots organizing, public protests, and similar other confrontational actions, character strengths such as bravery/courage/perseverance and teamwork might be particularly relevant. This study shows that the UAE culture does not find alignment with such strengths in the context of gender equality or environmentalism.

Finally, in support of our hypothesis, we found that endorsement of gender equality and environmentalism were associated with flourishing. This suggests that individuals with pro-gender equality intentions and pro-environmental attitudes/actions tend to flourish; that is, they believe they live a good life, actively contribute to the happiness and wellbeing of others, and maintain supportive and rewarding social relationships. This is consistent with past research showing a relationship between gender equality and environmentalism with wellbeing and life satisfaction (e.g., Audette et al., 2018; Venhoeven et al., 2013). A deeper examination of gender equality and flourishing revealed that higher flourishing was linked with higher support for women's work and leadership. Yet, greater flourishing was also associated with higher support for patriarchal attitudes and there were no associations with supporting a stop to gender-based violence. As the UAE is characterized as a patriarchal society, it is possible that gender-based violence is not adequately problematized or prosecuted (e.g., Human Rights Watch, 2021), explaining the weak or absent association between character strengths and stopping gender-based violence. This remains a point of interest because in the correlational analysis all three subscales of gender equality were highly correlated. More research is needed to understand this. Finally, the supplementary analyses did not support our hypothesis that character strengths would predict intentions to seek out knowledge about gender equality and environmentalism, which suggests that these issues might not be high on people's priorities.

Limitations

The sample size for this pilot study was small. However, the goal was to conduct an initial exploration of associations between the key variables and in particular, identify the specific character strengths that are meaningful for the study of endorsement of gender equality and pro-environment



action in the UAE. Although it must be remembered that character strengths are dispositions and like personality traits, may not always translate into attitudes or behaviour (Moeller & Stahlmann, 2019); it is also common for individuals to report more socially desirable attitudes and behaviours than what is observed in reality (Corral-Verdugo et al., 2014). Further, as with other online studies, researchers had less control over the study contact and it is hard to assess if participants put much effort into completing the surveys. We attempted to control for the attentive responding via attention checks, but the other limitations such as the possibility of participants consulting friends when completing a survey, we are not able to control. Some measures were developed for the study but were not put through psychometric testing. Yet, they are expected to have face validity. Self-reporting can also impact the results. Individuals could be biased in their responses (respond in socially desirable ways) or not completely follow instructions. Yet, it is meaningful that it might be socially desirable to simultaneously claim character strengths and endorse patriarchal attitudes. Finally, the sample was primarily female, young and Emirati; thus, it does not represent the overall population in the UAE.

Future Research

Future research could benefit from extending this study with a larger, more culturally diverse sample, which also includes more males. It could be especially beneficial to analyze gender differences between men and women to better understand how character strengths influence gender equality and environmentalism attitudes and behaviours. Further, going beyond self-reports, it would be useful to experimentally prime the importance of particular character strengths and examine the influence on participants' pro-environmental attitudes and behaviours, especially as prior research has shown pro-environmental action to be influenced by one's values and sense of identity (Balundé et al., 2019). Regarding gender attitudes and support for gender equality, more research is needed to understand the complexity of attitudes and support for gender equality. Importantly, it appears that cultural norms might impact some of the results. Future research should more comprehensively capture cultural norms around gender equality and pro-environmental action.

Finally, our sample included university students. As we were focused on the character strengths that were locally found in the support and action towards our two SDGs, future research should solicit the strengths of individuals known to be active in these realms and potentially part of organizations and groups that support these agendas. The same could be extended in neighboring Arab countries to determine how and whether these strengths differ from other populations, but also to harness what may be culturally relevant strengths in communications messaging, especially as pro-environmental actions are often influenced by local contexts (Hadler & Haller, 2011).

Conclusion

Character strengths are associated with pro-environmental actions and therefore, interventions focusing on character strengths in the UAE could help increase pro-environmental actions. This can help institutions and societies achieve the SDGs and create a more sustainable lifestyle for individuals living in the UAE, while improving the state of the earth's environment. It also speaks to the importance of moving past simply educating and raising awareness in favor of exploring the potential for developing interventions that can harness character strengths towards action, as well as the possibility of targeting marketing more specifically for character clusters or profiles and designing



better policies. Many character strengths were also associated with patriarchal attitudes in the UAE, therefore, interventions to decrease patriarchal attitudes may not benefit from using the language of character strengths. Yet, to stop gender-based violence and to increase support for women's work and leadership, focusing on character strengths may be promising. Thus, this study offers a nuanced, complex, and perhaps counterintuitive picture suggesting that leveraging people's best qualities may not always render support for the SDGs. Nonetheless, we echo the need for urgent and additional research towards leveraging the best in people to tackle the world's most pressing issues (Mayerson, 2020; Niemiec & Pearce, 2021).

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