#### **ORIGINAL PAPER**



# Influence of Religiosity on Youths' Attitudes Towards People with Disabilities in the United Arab Emirates

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Accepted: 16 August 2022

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#### **Abstract**

This cross-sectional survey investigates the influence of youths' religiosity on their attitude towards people with disabilities. The Muslim religiosity questionnaire and multidimensional attitudes scale towards persons with disabilities were used to survey 733 youths from the federal university in the United Arab Emirates. The results indicated that the youths were religious and had positive attitudes towards people with disabilities. An increase in religiosity is associated with a positive attitude towards disability, and both religiosity and total family income positively impacted the attitude towards people with disabilities. Reducing inequalities by including persons with disabilities is one of the UN 2030 Agenda for Sustainable Development objectives. Policies should aim to enhance curriculum, improvise public guidelines and partner with associated faith-based leaders to build an inclusive society for people with disabilities, thus helping to achieve sustainable development goals.

**Keywords** Disability  $\cdot$  Muslim Religiosity  $\cdot$  People of determination  $\cdot$  Social inclusion  $\cdot$  Sustainable Development Goals  $\cdot$  United Arab Emirates

## Introduction

Disability is any impairment to the mind or body which can limit an individual's ability to socially interact or participate in typical activities (Scheer & Groce, 1988). More than one billion people live with disabilities worldwide, representing 15% of the global population (Krahn, 2011), a number that is steadily increasing as the world population increases in age and disease burden (WHO, 2011). Moreover, the

Published online: 04 September 2022

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COVID-19 pandemic has further increased the burden on people with disabilities (Al Falasi & Khan, 2020; Ismail et al., 2020; Khan et al., 2022).

In September 2015, the United Nations member states adopted 17 sustainable development goals (SDGs) to address and alleviate significant global challenges related to humanity by 2030. The SDGs aim to 'leave no one behind' by systematically conceptualizing the SDGs in a blueprint to reduce disadvantages associated with disabilities and allow persons living with disabilities (PwD) to be more included in society and live independently (UN Department of Economic and Social Affairs Disability, 2015). The SDGs focus on education, growth, employment, reducing inequalities and increasing accessibility for people living with disabilities; however, expanding access and providing inclusiveness require positive attitudes towards PwD.

Attitudes are psychological tendencies and behaviours that reflect one's conscious or unconscious complex mental views developed through cumulative experience. Furthermore, attitudes involve individuals' beliefs, feelings and values that influence them to behave in a certain manner towards a particular class of objects (Altmann, 2008). Several studies have revealed that youths have neutral or positive attitudes towards PwD (Alnahdi, 2019; Nowicki & Sandieson, 2002; Satchidanand et al., 2012); however, their attitudes towards the subject vary (Barr & Bracchitta, 2015; Bottema-Beutel et al., 2019; Huskin et al., 2018). Negative attitudes from peers can lead PwD to feel avoided and excluded, which, in turn, can lead to poor relationships, loneliness, rejection and even being bullied (Armstrong et al., 2016; Barr & Bracchitta, 2015; de Boer et al., 2012; Szumski et al., 2020). Therefore, harnessing positive attitudes among young people towards PwD is essential for them to feel valued by their peers and to successfully integrate into the society (Barr & Bracchitta, 2015).

Attitudes have cognitive, emotional and behavioural domains (Vilchinsky et al., 2010), and attitudes towards PwD are multidimensional, influenced by interpersonal knowledge and skills (cognition), self-regulation, cultural competence (emotions), social values and decision-making skills (behaviours), coupled with other factors such as age, gender, exposure to PwD, social goals, culture and religion (Abualghaib et al., 2019; Gonçalves & Lemos, 2014; Han & Kemple, 2006; MacMillan et al., 2014; Nowicki & Sandieson, 2002). One such argument towards culture and religion influencing disability is that each culture has its own beliefs and practices regarding PwD, and the definition of disability varies as compared to their western counterparts (Hassanein, 2015; Retief & Letšosa, 2018; Siegel, 2001).

Religious beliefs and practices play an essential role in the lives of millions of people worldwide (Tomalin et al., 2019). In the United Arab Emirates (UAE), more than 50% of the population of 10 million are youths between the ages of 15 and 40 years (PwC, 2021), and more than 76% of the total population are practising Muslims (Thomas & Barbato, 2020). Islam influences UAE culture, and religiosity is articulated through its daily practice (Sheen et al., 2018).

Religiosity is defined as a personal way to express spirituality by adopting philosophies, doctrine, traditions and ritual practices that influence daily activities and essential life issues (Arrey et al., 2016); it has a significant influence on individual behaviours, attitudes and emotions (Henning-Geronasso & Moré, 2015). For



example, Islam acknowledges and advocates that PwD should be treated equally in society (Al-Aoufi et al., 2012; Bazna & Hatab, 2005). Islamic scripture and teachings devote considerable attention to people with physical disabilities; integrating PwD as a part of society and caring for them represent an important Islamic principle (Ghaly, 2009). Although Islamic philosophy has a positive attitude towards PwD (Al-Aoufi et al., 2012; Bazna & Hatab, 2005; Ghaly, 2016), Leyser and Romi (2008) demonstrated there was significant resistance to including PwD among the Arabs. Such beliefs can further be influenced due to traditions and cultures rather than religion (Sitzmann & Campbell, 2021).

There have been studies on demographic and psychological variables associated with different disabilities (Bottema-Beutel et al., 2019; Fioramonti et al., 2019; Morin et al., 2013; Page & Islam, 2015; Szumski et al., 2020; White et al., 2019), and researchers have investigated the influence of religion on attitudes towards PwD (Fioramonti et al., 2019; Leyser & Romi, 2008; Lifshitz & Glaubman, 2002). However, none have examined the influence of youths' religiosity, particularly Islamic religiosity, on their attitudes towards PwD. We believe that a better understanding of the link between religiosity and disability in young people and proposing social policies based on research evidence might help achieve the SDGs.

## **Hypotheses**

Based on our research findings above, we proposed the following study hypotheses:

**H1** Participants will have positive attitudes towards PwD.

**H2** People with a higher religiosity score will have more positive attitudes towards PwD.

**H3** Female sex, contact with individuals with disabilities and older age will predict more positive attitudes towards PwD.

# Methodology

## Study Design, Settin and Sample

We designed a cross-sectional study to examine a group of Muslim university students' attitudes towards disability and the impact of religiosity on their attitudes. Our inclusion criteria were that participants should be university students, at least 18 years of age, who self-identified as Muslim. This study was approved by the Social Sciences Ethics Committee for Research at the United Arab Emirates University (Reference No: ERS\_2021\_7245). Informed consent was obtained from the participants before conducting the study.

We used a priori G\* power to calculate the sample size (Faul et al., 2009) based on an assumed response rate of 5%. Using bivariate correlation analysis with an



estimated effect size of 0.15, power of 0.95 and alpha error of 0.05, a sample size of 565 participants was required; we added 10% (N=57) to adjust for any mistake in completing the survey, resulting in a final sample size of 622. The web-based survey was conducted in English and Arabic after a pilot test with 30 students. Following the pilot, the survey underwent forward-and-back translation and was rectified according to methodology (Wild et al., 2005).

We acquired data for the study by emailing all registered university students between February and September 2021. We started the survey on 10 February 2021 and achieved the required sample size on 21 March 2021. A total of 738 students participated in the study, and we excluded five who did not meet the inclusion criteria.

The study questionnaire consisted of a consent section that clearly stated the purpose of the study, study aims and objectives, and declaration of confidentiality and anonymity. Participation was voluntary, and we offered no incentives for participation.

## Survey Instrument

The questionnaire developed was a multidimensional assessing sociodemographics, coupled with the validated Muslim religiosity questionnaire (MRS) (Al Zaben et al., 2015) and multidimensional attitudes scale towards people with disabilities (MAS) (Findler et al., 2007).

#### Measures

## **Demographic Characteristics**

First, to characterize the study population, we collected descriptive information on participants' age, gender, year of the degree programme, marital status, nationality, classification of residence, home address, parents' highest education levels, exposure to disability and total family income. We coded nationality as 1 for Emiratis and 2 for all other nationalities, gender as 1 for women and 2 for men and geographic region as 1 for rural, 2 for suburban and 3 for urban.

## **Predictor Variables-Dependent and Independent Variables**

Age was categorized as '<18, 18–20, 21–23, 24–26, 27–30, 31–33, 34–36,>36'. Gender was categorized as Female=0 and Male=1. The nationality was categorized as Emirati and All other nationalities. Both the father's and mother's highest education were recorded as 'Don't Know', 'Illiterate and less than primary school', 'Primary and High school', 'undergraduate', 'Postgraduate' and 'PhD'. Disability exposure was recorded as 'none', College or work experience', 'family member' and 'self'. Total family income was categorized as 'Below 20,000 dirhams',



'20,000–30,000 dirhams', '30,000–50,000 dirhams', '50,000–75,000 dirhams', 'above 75,000 dirhams' and 'prefer not to say' covariates.

#### MRS

We measured religiosity using the 13-item MRS, which is a scale consisting of 10 items for religious practices (extrinsic religiosity) and 3 for religious beliefs (intrinsic religiosity) rated on a 5-point Likert scale (Al Zaben et al., 2015; Koenig & Al Shohaib, 2014) that has been validated in several studies (Saffari et al., 2016; Zaben et al., 2015). The religiosity score consists of the averages of intrinsic and extrinsic religiosity, calculated by averaging the results for questions 1–10 for extrinsic and items 11–13 for intrinsic.

#### MAS

We used the MAS (Findler et al., 2007) to measure students' attitudes towards persons with disabilities. The MAS is divided into three subscales: 16 items on feelings towards PwD, ten cognition items about perceptions of PwD and eight items on behaviours towards PwD; all items are rated on a 5-point Likert scale (from 1=not at all to 5=very likely). The MAS has been validated in several studies (Lu & Kim, 2017; Stevens et al., 2013; Yelpaze & Türküm, 2018). The score for attitude towards people with disabilities is the average of the three subdomain scores: emotion, cognition and behaviour. We reversed the negatively stated items on all scales prior to summing and calculating the mean.

## **Statistical Analysis**

We analysed the data for this study using SPSS 27.0 (IBM Corporation, Armonk, NY, USA) and presented them in tables and figures. We calculated reliability using Cronbach's alpha; data were expressed as frequency and percentage. We used descriptive statistics to be participants and calculated means and standard deviations for attitudes and religiosity scores for men and women across demographics. We used backward stepwise elimination to identify significant variables associated with MAS score at a significance level of 0.05 and one-way analysis of variance (ANOVA) to calculate any significance. We used Pearson's correlation and multiple linear regression analysis to estimate associations between the demographics, religiosity and participants' attitudes towards disability.

## Results

## Reliability

In terms of reliability, the MRS and the MAS showed high internal consistency and reliability,  $\alpha$ =0.70 and  $\alpha$ =0.873, respectively. Cronbach's alpha was also high,



0.851, for the total questionnaire, indicating that our instrument was robust and internally consistent.

## **Demographics**

We presented participants' detailed demographic characteristics in Table 1. A majority (80.8%) of the participants were women, single (90.0%), and between ages 18 and 23 (83%). Most students were humanities majors (21.4%), from Abu Dhabi (67.1%), and from an urban region (61.9%). Over half of the participants reported having no exposure to disability (52.3%), and only 5.5% reported a monthly family income of over 70,000 dirhams.

## **Hypothesis Testing**

We performed statistical analyses of our data to test the following study hypotheses:

H1: Participants will have positive attitudes towards PwD.

**H2**: People with a higher religiosity score will have more positive attitudes towards PwD.

**H3**: Female sex (a), contact with individuals with disabilities (b), and older age (c) will predict more positive attitudes towards PwD.

Table 2 shows a high mean religiosity score of  $3.32 \pm 0.45$ ) out of 5. In Pearson's correlation analysis, women had higher MRS scores than men (p = 0.008), and urban students were more religious than those from suburban and rural environments. Interestingly, religiosity increased with age: MRS score was the highest among students over age 36 (p = 0.002).

A one-way ANOVA was used to determine if the variance between the groups in the disability exposure was statistically significant. As represented in Table 3, the variance is significant (F=1.225, df=360, p=0.026) between the groups, and the difference in nationalities was found to be statistically insignificant (F=1.018, df=360, p=0.431).

The overall attitude scores of participants (M=3.67, SD=0.54) indicate a positive outlook on people with disabilities. The range of the attitude score (2.35–4.96) indicates a more positive attitude of participants towards people with disabilities. Variables included in the calculation of the attitude score were emotion (M=3.68, SD=0.56), cognition (M=3.47, SD=0.94) and behaviour (M=3.84, SD=0.70). The results of the multiple linear regression are depicted in Table 4.

Multiple linear regression was calculated to predict attitude score based on religiosity score, age, gender, total family income, disability exposure, mother's highest education level and nationality, and Table 3 presents these results. The participants' overall MAS scores and the score range (M=3.67, SD=0.54, range: 2.35-4.96) indicated positive attitudes towards PwD in our study; the MAS subdomain means were as follows: emotion: 3.68 (SD=0.56), cognition: 3.47 (SD=0.94) and behaviour (M=3.84, SD=0.70). Thus, H1 was supported.



**Table 1** Demographic characteristics of participants (n = 733)

		N	%
Gender	Male	141	19.20%
	Female	592	80.80%
Age	< 18	16	2.20%
	18–20	329	44.90%
	21–23	281	38.30%
	24–26	43	5.90%
	27–30	26	3.50%
	31–33	13	1.80%
	34–36	5	0.70%
	36–40	20	2.70%
Marital status	Single/Prefer not to say	661	90.10%
	Widowed	1	0.10%
	Divorced	3	0.40%
	Married	68	9.30%
	Other	17	2.30%
Degree	Undergraduate	615	83.90%
	Master's	60	8.20%
	PhD/Doctorate	41	5.60%
	Business and economics	14	1.90%
Major	Education	50	6.80%
	Engineering	89	12.10%
	Food and agriculture	25	3.40%
	Humanities and social sciences	157	21.40%
	Information technology	50	6.80%
	Law	56	7.60%
	Medicine and health sciences	143	19.50%
	Science	149	20.30%
Nationality	Emirati	589	80.40%
	All other nationalities	144	19.60%
Geographic region	Rural	65	8.90%
	Suburban	214	29.20%
	Urban	454	61.90%
	Do not know	12	1.60%
Father's highest education	Illiterate and less than primary	57	7.80%
-	Primary school and high school	307	41.90%
	Undergraduate	189	25.80%
	Postgraduate	156	21.30%
	PhD	12	1.60%
	Do not know	3	0.40%



Table 1 (continued)

		N	%
Mother's highest education	Illiterate and less than primary	78	10.60%
	Primary school and high school	326	44.50%
	Undergraduate	215	29.30%
	Postgraduate	110	15.00%
PhD		1	0.10%
	None	383	52.30%
Disability exposure	College or work experience	118	16.10%
	Family member	202	27.60%
	Self	30	4.10%
	Below 20,000 dirhams	181	24.70%
Total family income	20,000-30,000 dirhams	150	20.50%
	30,000-50,000 dirhams	117	16.00%
	50,000-75,000 dirhams	62	8.50%
	Above 75,000 dirhams	40	5.50%
	Prefer not to say	183	25.00%

**Table 2** Descriptive analyses of study variables (n=733)

Variable	Mean	SD	Range
Attitude score			
Emotion	3.68	0.56	1.44-5.00
Cognition	3.47	0.94	1.00-5.00
Behaviour	3.84	0.70	1.50-5.00
Total Attitude Score	3.67	0.54	2.35-4.96
Religiosity scores			
Intrinsic Religiosity	4.34	0.83	1.00-5.00
Extrinsic Religiosity	3.02	0.56	1.00-4.50
Total Religiosity	3.32	0.45	1.00-4.62

One-way ANOVA revealed statistically significant variance between the groups in disability exposure (p=0.026; detailed data not shown), and disability exposure had a negative relationship with attitudes towards PwD (p<0.001, 95% CI: between – 0.126 and – 0.031): Respondents who had exposure to a person with disability revealed lower MAS scores, and thus, more negative attitudes towards PwD, which refuted H3b. Finally, age (p=0.004, 95% CI: between – 0.078 and – 0.015) also had a negative relationship with attitudes towards PwD: Younger students had lower MAS scores and, thus, more negative attitudes, which supported H3c. Table 5 represents an independent sample t-test for gender differences in religiosity and attitude. In Table 6, it can be concluded that there was a significant difference



**Table 3** ANOVA results of differences in attitude towards people with disabilities within the categories of disability exposure and nationality

Variable	e Sum of squares Df		Mean square	F	Sig
Disability exposure					
Between groups	258.727	360	0.719	1.225	0.026
Within groups	218.174	372	0.586		
Total	476.900	732			
Nationality					
Between groups	10,908.179	360	30.300	1.018	0.431
Within groups	11,068.329	372	29.754		
Total	21,976.508	732			

**Table 4** Multiple linear regression results for the significant variables (dependent variable: attitude score)

Variables	β	SE	p	95% CI	
				Lower	Upper
(constant)	3.612		< 0.001	3.273	3.951
Total family income	0.038	0.010	< 0.001	0.017	0.058
Disability exposure	-0.079	0.024	0.001	-0.126	-0.31
Nationality	0.174	0.052	< 0.001	0.071	0.277
Gender	-0.133	-0.50	0.008	-0.231	-0.34
Geographic region	-0.060	0.030	0.047	-0.119	-0.001
Age	-0.046	0.016	0.007	-0.78	-0.015
Religiosity	0.108	0.37	0.004	0.036	0.180

Legend: Summarized result of the multiple linear regression using all the predictors captured in the survey. The table only shows the final model which contained only the statistically significant variables

**Table 5** Independent sample t-test for gender difference in religiosity and attitude (n=733)

	Men		Women		t	p	CI		Cohen's d
	M	SD	M	SD			UL	LL	
Religiosity	41.88	7.48	43.58	6.80	-0.29	0.01	-3.04	-0.49	0.23
Emotional attitude	58.82	11.78	58.95	11.43	-0.13	0.90	-2.25	1.98	0.00
Cognitive attitude	32.56	9.66	35.26	9.23	-3.10	0.00	-4.42	-0.99	0.00
Behavioural attitude	29.73	5.04	30.62	5.24	-1.79	0.07	-1.83	0.808	0.17

Cohen's d significance at 0.051

in religiosity when undergraduate, master's and doctoral students were compared (F=7.58, p<0.001). Masters level students were more religious (M=46.27, SD=5.36) than undergraduate (M=42.93, SD=6.90) or doctoral students (M=44.90, 8.31). No significant difference was observed in emotional, behavioural



Variables	Undergi	aduate	Masters		Doctora	1	F (2)	$\eta^2$
	M	SD	M	SD	M	SD		
Religiosity	42.93	6.90	46.27	5.36	44.90	8.31	7.58	0.08
Emotional attitude	58.72	11.28	61.78	12.09	58.00	14.35	2.07	0.00
Cognitive attitude	34.79	9.42	35.27	8.73	33.05	9.03	0.78	0.00
Behavioural attitude	30.42	5.17	31.62	4.72	29.29	6.30	2.53	0.00

**Table 6** One-way ANOVA for difference in religiosity and attitude among different levels of study (N=733)

and cognitive attitudes towards disability according to degree type (detailed data not shown but available on request).

## Discussion

With this study, we aimed to examine religiosity and its relationship with attitudes towards PwD among young university students who self-identified themselves as Muslim and those who showed high religiosity scores in our results. The results align with those of the previous studies, which state that people of the Islamic faith practice their religion and hold a strong affiliation to Islam in the Gulf region (Johansson-Nogués, 2020). Religiosity is an essential component of the daily life of individuals in the UAE and is ingrained into their beliefs, attitudes and practices (Alhebsi et al., 2015; Weathers, 2018). As for the youth, religiosity is entwined with their attitudes and behaviours (Amiri et al., 2013; Simadi & Kamali, 2004). We hypothesized that youths with high religiosity scores would show positive attitudes towards PwD, and our results confirmed the hypothesis. A possible explanation of the findings could be a desire to ensure the current prevailing norm within a Muslim country (González, 2011). Moreover, the present findings of increased religiosity among youths should be viewed with caution as religiosity can have a negative impact on behaviour and attitudes (Albaghli & Carlucci, 2021; Thomas et al., 2018). Hence, we propose future comprehensive studies that can provide essential insights of youths concerning their religious affiliations, which can contribute to positive building of the society.

The results are consistent with Islamic teachings, which emphasize caring for people with disabilities and their offspring while avoiding hurting their feelings (Austen, 2021; Morad et al., 2001), as well as similar findings in the USA among Christian students (Fioramonti et al., 2019) and secular Jewish youths (Leyser & Romi, 2008). Notably, however, some researchers found the opposite: Arab (Leyser & Romi, 2008) and South Asian British Muslims (Sheridan & Scior, 2013), with high religiosity had negative attitudes towards PwD.

Previous researchers have established that attitudes are multidimensional and complex (Antonak & Livneh, 2000; Vignes et al., 2009). Despite our finding supporting our first two hypotheses, multiple regression analyses revealed that attitudes



towards PwD were affected by unaccountable various factors. This could be related to societal stigmatization, cultural traditions and day-to-day practice variations regarding meeting and addressing PwD and subjective norms, which may negatively affect inclusion of PwD (Leyser & Romi, 2008; Miles, 2002; Sheridan & Scior, 2013). Our findings highlight a need for additional research on multiple factors influencing attitudes towards PwD.

Individual components of attitudes revealed that participants had more positive emotion and behaviour attitudes than they exhibited in the knowledge domain, which, in turn, supported findings by Higgins et al. (2002) that acceptance of PwD happens in stages of affective and behavioural domains, followed by transformation of attitudes. Our study alludes towards the theory that attitudes are more influenced by emotions, and nurturing positive emotions through harnessing empathy is necessary (Diamond, 2001). Our findings validated our hypothesis of generally positive attitudes towards PwD, which are consistent with the previous study findings among Arab students of neutral to positive (Masa'deh et al., 2020) or exclusively positive (Al-Musabbihin, 2015; Jaddou & Abdullah, 2018) attitudes towards persons with disabilities.

In addition to the influence of Islam's emphasis on respect for individuals irrespective of disabilities, the UAE government has undertaken intentional efforts to enhance awareness of people with physical disabilities and to integrate them into local communities as productive individuals. However, our finding of lower cognitive attitude scores indicates a continuous need to expand awareness of the needs and desires of PwD. We concur with Al-Khayyat (2020), who proposed an active role for the media in increasing public awareness of the rights of people with disabilities and of the services they should receive. Combining official and nonofficial efforts to enhance understanding of the needs and circumstances of PwD will help promote better peer behaviour, positive interactions and higher social competence (McDonald & Messinger, 2011).

In the current study, women reported higher religiosity scores than men; this finding is consistent with earlier studies (Alshehry et al., 2020; Baker & Whitehead, 2016; Bossaert et al., 2011; Szumski et al., 2020;). Loewenthal et al. (2001) argued that Muslim women are less socialized than men and play more traditional roles limited to home and family; this limited sphere creates the space for women to pray and worship and might allow them to claim stronger Islamic faith than men (Miller & Stark, 2002). Researchers in the Christian context have also linked religiosity, motherhood and femininity (Sullins, 2006; Woodhead, 2008).

Further, we have hypothesized that exposure to disability would be associated with more favourable attitudes towards PwD; however, we discovered the exact opposite. Our result was consistent with earlier findings that exposure to different types of disabilities, especially emotional or behavioural challenges or multiple disabilities, worsened peers' attitudes towards PwD (de Laat et al., 2013; McCoy & Banks, 2012) and conflicted with other studies in which exposure to PwD improved attitudes towards PwD (Armstrong et al., 2016; Nikolaraizi et al., 2005; Nowicki & Sandieson, 2002). A possible explanation for the discrepancy is that the latter studies were conducted in early childhood, where exposure to PwD transformed children's attitudes. In contrast, we studied young adults who already had firm attitudes.



Nevertheless, it is essential to integrate PwD with disabilities studies. In any interventions for therapies aimed at integrating PwD both the knowledge component effect and behaviour component should be part of any such interventions or therapies (Meyers & Lester, 2016). We believe it is necessary to incorporate physical ability and social, economic and cultural differences into curricula so that accepting PwD will become a norm (Brownlee & Carrington, 2000; Rillotta & Nettelbeck, 2007).

Expanding awareness and improving attitudes towards PwD can contribute to achieving the global SDGs in many ways. For instance, changing attitudes towards PwD and providing job opportunities in an inclusive workforce can help eradicate poverty (SDG 1, no poverty and SDG 8, decent work and economic growth); increasing positive attitudes towards PwD can nurture physical, social and mental well-being (SDG 3, good health and well-being); ensuring equal access to education for PwD addresses SDG 4 (quality education) and providing equal access to local transport options helps achieve SDG 10 (reduce inequalities).

Faith and religion are integral parts of the UAE society: education, eating habits, laws and legislation, food, clothing and daily chores are strongly influenced by the Muslim faith (Khan, 2019; Kourgiotis, 2020), and this faith places great emphasis on equality, respect, tolerance and generosity. Though researchers have determined how social, human and economic capital can build societies, very few have examined the impact of religious and spiritual capital on fostering social justice, human dignity and respect for human rights. To expand the positive influence of religious faith on public attitudes towards persons with disabilities and on social development in general, we believe it is necessary to integrate local religious leaders and faith-based actors into the SDG agenda and educate them on how they can contribute to achieving SDGs in their communities (Tomalin et al., 2019).

## **Strengths and Limitations**

To our knowledge, this is the first study evaluating the influence of youths' religiosity on their attitudes towards PwD in the UAE. We identified mostly tolerant attitudes, although notably, respondents with exposure to disability had slightly pessimistic attitudes. However, this study has certain limitations. First, because it was a cross-sectional study, we could not establish any causality in any of the identified relationships. Second, because we relied on self-reported data, there is a risk of social desirability bias. Third, although the study represented different areas of the UAE, we limited the study sample to only adult students at the UAE University and did not include more senior age groups; in addition, most students were Arab-Muslims. We advise research with broader samples from diverse ethnicities and



countries to examine the cross-cultural differences in associations between religiosity and individuals' attitudes towards persons with disabilities. We also did not assess progression of attitudes over time; future researchers could conduct long-term prospective studies to identify what factors can change young people's attitudes.

# **Conclusions, Implications and Future Directions**

The young people we interviewed for this study were identified as religious and revealed positive attitudes towards persons with disabilities. Further, we identified clear correlations between religiosity and positive attitudes towards PwD and proposed ways to incorporate religiosity into helping communities in the UAE to achieve the global SDGs. We further suggest designing and testing age-appropriate experiential interventions to improve perceptions of disability. In the findings we obtained, attitudes towards disability varied according to variables, such as age, gender, nationality and exposure to disability; for instance, women and urban youth were more religious than men and rural residents, and exposure to disability had a negative correlation with attitudes towards PwD. We proposed a disability awareness curriculum that could uniformly educate the young public and instil positive attitudes towards PwD and social inclusiveness, as well as integrate families, communities and other social institutions. Beyond the school context, we also propose policies and interventions to improve perceptions of disability during childhood. Further research should aim at establishing a disability curriculum for students of all ages, guidelines for the public and policies and strategies for making a more inclusive society.

## **Appendix**

See Table 7.



Table 7 ANOVA and model summaries of the multiple linear regression model

Model	Sum of Squares	df	Mean square	F	Sig	R	R square	Adjusted R square	
1	Regression	16.964	13	1.305	4.715	.000 <sup>b</sup>	0.28	0.079	0.062
	Residual	199.002	719	0.277					
	Total	215.966	732						
2	Regression	16.956	12	1.413	5.112	$.000^{c}$	0.28	0.079	0.063
	Residual	199.010	720	0.276					
	Total	215.966	732						
3	Regression	16.817	11	1.529	5.535	$.000^{d}$	0.279	0.078	0.064
	Residual	199.149	721	0.276					
	Total	215.966	732						
4	Regression	16.592	10	1.659	6.008	$.000^{e}$	0.277	0.077	0.064
	Residual	199.374	722	0.276					
	Total	215.966	732						
5	Regression	16.361	9	1.818	6.585	$.000^{f}$	0.275	0.076	0.064
	Residual	199.605	723	0.276					
	Total	215.966	732						
6	Regression	16.048	8	2.006	7.265	.000 g	0.273	0.074	0.064
	Residual	199.918	724	0.276					
	Total	215.966	732						
7	Regression	15.328	7	2.190	7.913	.000 $^{\rm h}$	0.266	0.071	0.062
	Residual	200.638	725	0.277					
	Total	215.966	732						

Dependent Variable: Attitude Score

Legend: This table combines the ANOVA and model summary tables outputs from SPSS that show the significance and R2 values of all the models that were tried



<sup>&</sup>lt;sup>a</sup>Predictors: (Constant), father highest education, Gender, Marital Status, Disability Exposure, Home Emirates, Geographic Region, Religiosity Score, College, Nationality, Level of Program, Total Family Income, mother's highest education, Age

<sup>&</sup>lt;sup>b</sup>Predictors: (Constant), Gender, Marital Status, Disability Exposure, Home Emirates, Geographic Region, Religiosity Score, College, Nationality, Level of Program, Total Family Income, mother highest education, Age

<sup>&</sup>lt;sup>e</sup>Predictors: (Constant), Gender, Marital Status, Disability Exposure, Home Emirates, Geographic Region, Religiosity Score, College, Nationality, Total Family Income, mother's highest education, Age

<sup>&</sup>lt;sup>d</sup>Predictors: (Constant), Gender, Marital Status, Disability Exposure, Home Emirates, Geographic Region, Religiosity Score, Nationality, Total Family Income, mother's highest education, Age

<sup>&</sup>lt;sup>e</sup>Predictors: (Constant), Gender, Marital Status, Disability Exposure, Geographic Region, Religiosity Score, Nationality, Total Family Income, mother's highest education, Age

<sup>&</sup>lt;sup>f</sup>Predictors: (Constant), Gender, Disability Exposure, Geographic Region, Religiosity Score, Nationality, Total Family Income, mother's highest education, Age

<sup>&</sup>lt;sup>h</sup>Predictors: (Constant), Gender, Disability Exposure, Geographic Region, Religiosity Score, Nationality, Total Family Income, Age

**Acknowledgements** The authors would like to thank all the participants who participated in the study. We extend our gratitude to Ms HM (Medical Research Specialist) and Dr KKA for their contribution in translating and research administrative activities.

Author Contributions All authors contributed to the study conception and design. HH and MABK conceived and designed the study. HH, MABK, IE, MB, LI and HM organized the activities. MABK, HH and IE managed the activities and collected the data. MB, AA, BSBK and LI analysed and interpreted the data. MABK, HH, MB, IE, KO, AA, AK, BSBK and LI drafted the article. MABK, HH, MB, IE, KO, AA, BSBK, AK and LI revised the manuscript critically for important intellectual content. All authors read and approved the final manuscript.

**Funding** This work was supported by the United Arab Emirates University Research Grant (Grant number [G0000356/12M090-NP-21-13]).

#### **Declarations**

Conflict interest The authors have no relevant financial or non-financial interests to disclose.

**Ethical Approval** This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Social Sciences Ethics Committee for Research at the United Arab Emirates University (Reference No: ERS\_2021\_7245).

**Informed Consent** An informed consent was obtained and approval obtained from the participants before conducting the study.

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