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The impact of a universal social emotional intervention on students' mental wellbeing in a secondary public school in Qatar

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Abstract: This paper is based on a study that explored the impact of a practitioner-designed social emotional program on students' wellbeing based on the results of the WEMWBS scale in a public secondary school in Qatar. This cluster randomized controlled trial study (RCT) involved the assignment of two groups; an intervention group ($n = 82$) to receive a universal social emotional intervention and a control group ($n = 81$) to continue with the usual practices without attending or participating in any social emotional interventions. Students in both groups rated their wellbeing levels before the intervention (baseline) and after the intervention (post intervention). The results revealed a significant improvement in students' wellbeing after participating in the SEL intervention with an adjusted effect size of (EF = 0.76). The paper discusses the results of this study in the light of the program's design and social context.

Subjects: Cultural Studies; Education; Social Work; Sociology; Cultural Studies

Keywords: Social emotional learning; wellbeing; mental health; school-based interventions

1. Introduction

Enhancing children's positive mental health and wellbeing improves their ability to maintain social relationships, achieve academically and become responsible citizens in the future (Greenberg et al., 2003; Weare, 2010). Moreover, "adolescence is a critical time of formative growth to achieve human potential—a fascinating period of profound physical, psychological, and emotional change" (Dahl et al., 2018, p.1). In this regard, Dunn and Layard (2009) suggest that life will not run completely perfectly and smoothly for everyone. Therefore, children and adolescents from any social level or background can be faced with issues like exam stress, peer bullying, family break-ups and all other issues that can negatively impact their wellbeing levels.

As a result, recently, promoting adolescents' positive mental wellbeing as a preventive approach has become a national priority worldwide (Clarke et al., 2015; Greenberg et al., 2003). In relation, improving children and adolescent's wellbeing, meeting their rights and assigning the appropriate

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interventions and projects to address those needs are highlighted as a social indicator of nations' developments and progress (Adamson et al., 2007; Ben- Arieh, 2008).

In recent years, the interest in implementing social and emotional learning (SEL) initiatives in schools to promote students' wellbeing has increased worldwide (Najaka et al., 2001; Westerhof & Keyes, 2010). The trend is particularly apparent in the range of school based interventions that aimed to address students' mental wellbeing (Durlak et al., 2011; N. Humphrey et al., 2013). These interventions were usually conducted, evaluated and reported positive outcomes in different Western contexts (Sklad et al., 2012). Despite the importance of SEL interventions, studies that investigate the impact of SEL interventions in the Middle East are still very limited with very few studies in the Gulf and the Arabic countries focusing on this field of studies. More specifically, no studies have been conducted in Qatar to explore the impact of social emotional interventions on the promotion of students (adolescents') level of wellbeing. Therefore, this study aims to address the research gap in this Arabic context by investigating the impact of a SEL intervention on students' wellbeing. In more details, this article reports on the impact of a social emotional intervention based on Islamic and culturally related concepts that was implemented in a public school in the Qatari context on students' mental wellbeing levels.

1.1. Literature review

In order to understand the impact of SEL interventions on students' wellbeing, there is a need to conceptualize the meanings of mental wellbeing, social emotional learning and the links between those concepts *Mental wellbeing* is conceptualized in various ways in the literature. Seligman et al. (2004) view mental wellbeing as individuals' positive perspectives, evaluations and emotional considerations of their life satisfaction. Cowen (1991) argues that mental wellbeing is more than the absence of mental problems; rather, wellness is more related to strong relationships, coping strategies, resilience and exposure to different life events, activities and environment that empower individuals and promote the level of wellness. In relation, Adamson et al. (2007) suggests that mental well- being refers to absence of mental illness as well as the broader sense of positive functioning that facilitate life satisfaction.

One conceptualization of mental wellbeing that offers a holistic meaning of wellbeing is the idea of *positive mental health* by Ryan and Deci (2001). Within this concept, positive mental health is considered as a state of complete mental, physical and social status that allows individuals to realize their inner worth, cope with stress and contribute positively to their community. This concept is related to the World Health Organization's definition of positive mental health as a healthy status in which "the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (World Health Organization, 2005, p. 2).

Rather than focusing on mental illness, positive mental wellbeing represents an important protective approach that aims to prevent mental health issues (Gargiulo & Stokes, 2009; Nasser, Cherif & Romanowski, 2011). In a related concept, Seligman (2011) emphasizes that the modern psychological study of well-being and its related concepts like resilience, and prosocial behaviours belong together under the common umbrella of *positive psychology*. These concepts form the relationship between social emotional skills and wellbeing, in which the promotion of wellbeing is the outcome of gaining different social emotional skills. In this regard, Seligman (2002, p. 3) argues that "the aim of positive psychology is to catalyze a change in psychology from a preoccupation only with repairing the worst things in life to also building the best qualities in life". Therefore, the objective of positive psychology is the promotion and empowerment of an individual's inner capacities to prevent mental wellbeing issues.

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One of the promising approaches to promote students' mental wellbeing within the positive psychology concept is the idea of social emotional learning (SEL) (Seligman, 2011). Schools play a central role in the lives of children and their families and it has been argued that truly comprehensive and effective mental wellbeing health promotion in schools can improve students' mental wellbeing levels. As such, many SEL interventions were designed, implemented and evaluated in different contexts worldwide (Barry et al., 2019; Greenberg et al., 2003; N. Humphrey et al., 2013; Taylor et al., 2017).

SEL interventions can be designed in a culturally related approach (Abdel-Khalek, 2011; Wong et al., 2014). In this regard, Chan et al. (2019, p.33) mentioned in their report of youth mental health promotion that "there is a lack of research on how religion, an important dimension of human diversity, influences the implementation and effectiveness of these interventions". Therefore, this study is evaluating the impact of a universal social emotional intervention that was designed based on religious and cultural aspects related to the Qatari community and cultural norms.

1.2. Study context

Qatar is a peninsula located in the Middle East in the Arabian Gulf with a population of 2,833,882 (Scharfenort, 2012). The majority of the population are non-Qataris (85%) compared to the minority (15%) of Qatari nationals. Non-Qatari expatriates are either long-time residents born and raised in Qatar or short-time residents with temporary job contracts. The religion of all Qatari nationals is Islam and Arabic is the first language of the country.

The government in Qatar aims to achieve clear plans, vision and agendas mainly in the healthcare, sport and education sectors. In addition, the increasing emphasis on the importance of mental wellbeing promotion for children and adolescents is a national priority in Qatar.

Adolescents' mental wellbeing issues in the Arabic and Qatari context are different from the West. The cultural and Islamic values are the guiding principles there. Moreover, the Islamic religion has an important role in addressing individuals' spiritual, emotional and social needs and represents one of the main socio-cultural aspects in Qatar. However, Qatari nationals are facing challenges "as they encounter expatriate values different to their own traditional norms" (Foody et al., 2017, p.2). In relation, the mix of the Qatari community that includes different nationalities in which students interact and learn from each other can have an impact on the cultural and traditional values that they are supposed to learn and practice.

In a report published by the UNICEF in 2013 on children and adolescents' wellbeing in 29 rich countries, worrying results of behavioural issues that include physical fights, bullying and cigarette smoking were revealed (Karimi et al., 2017). Although no similar research or statistics exist for students' well-being in Qatar, similar students' educational and wellbeing issues can be assumed. In this regard, Al Romaihi et al. (2016, p. 60) reported in their study that "the prevalence of health risk behaviours among secondary school students in Qatar was found to attain a relatively high level". Furthermore, they reported that these risky behaviours are mainly related to physical school fights, unlicensed driving certificates and cigarette use. Therefore, Al Romaihi et al. (2016)

emphasized the need to increase secondary school students' awareness of the impact of behavioral issues on their wellbeing and school performance through progressive school based interventions.

Worldwide, the policies of mental health and wellbeing are changing to move the focus from treatment to more preventive approaches that provide children and adolescents with skills to enable them to face different life challenges. These approaches are limited in Qatar, and this limitation represents the need for implementing SEL interventions, evaluate the outcomes and develop different future interventions that address students' social emotional needs (Al Romaihi et al., 2016)

This study was conducted with the aim of the impact of a SEL intervention in a Qatari Islamic Arabic context on students' wellbeing. In particular, the paper explores the implementation of a culturally specific form of SEL intervention on students' wellbeing.

1.3. methodology

This study employed a randomized controlled design, with assessments carried out before the SEL intervention (T1) and immediately after the intervention (T2). The main hypothesis that guided this investigation was; would a social emotional programme in a Qatari girls' school significantly improve students' self-reported wellbeing levels? Therefore, based on this question, the hypothesis was that "the social emotional intervention will improve students" welling level for the intervention group compared to the control group'. The control group was a non-intervention control group that did not participate in any social emotional intervention sessions or take part in any other social emotional activities or support from teachers during the time of the intervention. They continued to attend their usual regular classes, and their involvement in the study was limited to completing the WEMWBS scale at the different phases.

An educational specialist who designed the social emotional learning program delivered the intervention. In addition, the program was implemented on a weekly basis within the school's setting. The intervention group was invited to attend the program in the school hall where the program was implemented every week for two hours.

1.4. Methods

Eligible schools were preparatory (secondary) public schools in Qatar that provide government education for students from the ages of 13–15 in Qatar. After obtaining the Ministry of Education's approval, four elementary schools in Doha—Qatar, equivalent on school size, achievement level, socioeconomic status (SES), and ethnic diversity were randomly selected. These schools were identified as potential sites for the study because of their population of Qatari and Arabic students. Two schools refused to participate and two schools accepted to participate. Before the social emotional intervention, one school withdrew its acceptance. The evaluation of the intervention took place in a public school serving approximately 800 girl students in Doha, the capital city of Qatar. This case study school included girl students attending year 7 and aged 13–15 years. In Qatar, government schools are segregated for girls and boys from years 1–12. Therefore, for this study, the focus was on one case study school that includes girl students.

1.5. Student sample

The student sample consisted of an intervention group ($n = 82$) and a control group ($n = 81$) of year 7 students with a mean age at baseline of 13 years. Of those students, in the intervention groups, 90% were Qataris, and 10% were non-Qataris, while in the control group, 85% were Qataris and 15% were non-Qataris The non-Qatari students' origins were from different Arabic backgrounds including, Egypt, Syria, Palestine, Sudan, and Iraq. Therefore, the intervention group and the control groups did not significantly differ on any of the demographic details. Arabic is the teaching, instruction and native language of all participants, and all students were Muslims. Before providing their answers, students in both groups were provided with a short description of the research, the

survey and their choice of voluntary participation. In addition, Students' participation required consent from their parents before the start of the study. All students and their parents from both groups agreed to participate.

Students at Grade 7 from 9 classes were randomly selected to serve as an intervention and a control group This approach of sampling, according to S. Cohen et al. (2007, p.153), is useful when the researchers aim to ensure that "each member of the population under study has an equal chance of being selected". The aim of this random assignment was to select a diverse sample to be part of the universal SEL intervention. The sampling step involved the selection of the intervention and the control group of students for the pre and post-intervention comparisons.

Students in both groups were provided with a detailed explanation about the WEMWBS scale they needed to complete before starting the SEL program. The intervention group's participants were informed that they would be assigned to an intervention group that will involve (1) completing a pre-intervention scale, (2) attending weekly intervention sessions (8 sessions, 1 hour each), (3) completing a post-intervention after the final program's lesson to assess the impact of the intervention on changing participants' wellbeing levels. The control group students were informed that their participation will be limited to completing a pre and post intervention scale to explore their wellbeing levels without participating in the SEL intervention. These scales were filled by students themselves while the class teacher was attending and observing the process without any interference.

1.6. The positive steps intervention

The SEL program that was implemented in this study was the Positive Steps program. This school-based program aims to increase students' social emotional skills and overall positive mental well-being by translating Islamic concepts that deal with human happiness and life purpose into tools and skills that can be integrated into their daily lives. The program's methods were designed based on student-centered, problem-solving, cooperative learning and discussion techniques to fulfil the aims towards the development of cognitive and emotional skills.

The Positive steps program included a course of 8 sessions;(1) Emotions Management and Self-realization (2) Taking Responsibility (3) Focusing on Empowering Interpretations (4) Purpose in life (5) Creating Meaningful relationships (6) Setting Goals (7) Spiritual life (8) Happiness and wellbeing. All the sessions are designed based on cultural, traditional and Islamic religious values in accordance with the Qatari community. Furthermore, each session is provided based on real-life stories, quotes from Qur'an, Islamic traditions and Qatari cultural concepts. The contents of each session are presented by PowerPoint, short video clips and activities related to the subject of the session.

1.7. Research tool

The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) is composed of 14 positively worded items, and each item's score is ranging from 1 (none of the time) to 5 (all of the time). The overall score for the WEMWBS is calculated by totaling the numbers for each item with equal weights with a maximum score of 70. The scores are simply combined to produce the overall score that indicate individuals' wellbeing levels. Therefore, the higher the WEMWBS scale's score, the better indication of mental well- being level. The WEMWBS scale can be used before and after an intervention (within eight weeks duration) to establish if students' mental wellbeing has been improved (Tennant et al., 2007). All students filled the scales and the returned scales did not include any missing values. Therefore, no data was missed or eliminated from this study. In addition, no differences occurred between the groups within the research process.

1.7.1. Data analysis

Descriptive statistics of mean, standard deviation and average were used in the analysis of the WEMWBS scale results. In addition, independent t-tests were conducted to determine whether there were any systematic differences between the groups prior to the intervention. Furthermore,
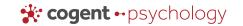
Table 1. 1 descriptive statistics for wellbeing scores			
Items	**N.**	**Mean**	**SD**
Pre-Program- Intervention Group	82	55.8	10.77
Post-Program- Intervention- Group	82	60.1	7.44
Pre-Program- Control- Group	81	55.3	10.51
Post-Program Control- Group	81	55.1	10.84

a probability level in determining the statistical significance of ±.05 confidence intervals were used to determine the significance of the results. In addition, a calculation of effect size (ES) (Cohen's d) of the observed data was conducted to determine the impact of the program on students' mental wellbeing outcomes levels (P. R. Cohen & Howe, 1988). This analytical approach facilitates the comparisons of the obtained results with prior related research that used the same type of indication to determine the interventions' outcomes (Hedges & Hedberg, 2007). These calculations are based on the standardized mean difference or effect size (ES), by subtracting the means of the control group from the intervention group at pre and post- test. Higher effect size's levels reflect greater positive program impact, while lower effect sizes (EF around 0.20 and less) reflect non-significant improvement based on previous educational research (Payton et al., 2008). This type of calculation was conducted in many previous studies to evaluate the impact of SEL programs (Durlak & Wells, 1997; Payton et al., 2008).

In addition, and to more accurately assess the relative changes in the two groups over time, an adjusted effect was calculated. This calculation was based subtracting the pre- effect from the post-effect (P. R. Cohen & Howe, 1988).

2. Results
The data analysis indicated there were no significant difference in wellbeing scores at pre between the control and SEL groups but at post a significant difference appeared favoring the SEL groups. Table 1 contains the pre and post data.

In terms of t-value, p-value and *EF* values, for the pre intervention comparison between the intervention and the control group, the independent sample tests revealed; ($p = 0.138$), ($t = -1.492$) and an effect size of (EF= − 0.234). These results confirmed that there was no significant difference in the means of the control and the interventions groups before the intervention and slightly favoring the control group. In contrast, results indicated the values of ($p = 0.001$), ($t = 3.397$) and (EF = 0.533) suggesting a significant difference favoring the intervention group over the control group. in this regards, the adjusted effect size (that was conducted by subtracting the pre effect from the post effect) indicted a value of (0.767) indicating a relative change in between the two groups across time.

3. Discussion
The hypothesis that guided this study and was based on the previous studies was that; participating in the social emotional program will promote students' self-reported wellbeing (Greenberg et al., 2003; Payton et al., 2008). Consistent with this hypothesis, the WEMWBS scale analysis revealed that students' wellbeing levels in the intervention group were significantly improved after the program. These improvements were achieved within the intervention group and compared to the control group. In addition, the calculations of the adjusted effect size (0.767) between the pre and post, and the effect size of (0.533) at post (P. R. Cohen & Howe, 1988) of the collected data confirm the positive impact of the SEL program on students' mental wellbeing outcomes levels.

These results are consistent with many previous studies that evaluated the impact of SEL programmes. Durlak and Wells (1997) evaluated 177 school-based prevention programmes and

used EF as one of the main approaches to explore the impact on students externalizing behaviours. Their study revealed that effective social emotional programmes that targeted the awareness of emotions resulted in robust gains in different competencies (EF from 0.69 to 0.85). In relation, Payton et al. (2008) used the EF indicator to determine the impact of SEL programmes on students' outcomes in their meta-analysis of 180 studies and found a range of EF from(0.23 to 0.60). Neil and Christensen (2009) applied the EF evaluation method to explore the effectiveness and outcomes of 27 school-based prevention programmes and revealed a range of effect sizes results from (0.11 to 1.37). January, Casey and Paulson (2011) used EF to evaluate 28 SEL studies' outcomes and found an EF of 0.50, indicating a statistically significant improvement in students' different skills. Furthermore, the results of this study contradict others studies that reported less EF values indicating that SEL programs did not have an impact on students' wellbeing. For instance, Wilson, Gottfredson, and Najaka's (2001) conducted a meta-analysis of 165 prevention social competence activities and reported a range of EF from 0.04 to 0.29.

These results indicate that students' self-reported wellbeing levels in the intervention group were increased after their participation in the positive steps SEL programme. In contrast, there was no change in the wellbeing levels for students who did not participate in the sessions suggesting that, non-participation is related to unchanged wellbeing levels. The unchanged levels of wellbeing in the control group reflect that the daily classroom practices might not improve students' wellbeing. However, there was no significant decrease in students' wellbeing levels in the control group, suggesting that not participating in SEL intervention did not negatively impact students' wellbeing levels. These results confirm the notion that, exposing students to social emotional programme that serve their social emotional needs can improves their wellbeing levels compared to students who do not have the opportunity to participate in SEL programs.

SEL programs are influenced by cultural issues in the context of implementation. According to Goldberg et al. (2019), individuals are raised, socialized and interacted within a culture that determines their values, motivation and social behaviours that have a direct impact on their wellbeing levels. Therefore, adapting to these values in a culturally appropriate approach can lead to higher levels of inner wellbeing. This study aimed to add to the literature base of social emotional learning and students' wellbeing by examining the possible outcomes of a school-based SEL intervention based on Islamic concepts on students' wellbeing in an Arabic Qatari context. The results indicate that culturally adapted interventions might contributed to the program success. These results are consistent with previous studies that highlighted the relationship between culturally based SEL intervention and positive outcomes. Castro-Olivo (2014) revealed in his study that a culturally adapted SEL program resulted in a significant impact on adolescents' social emotional, resiliency and self- knowledge. Cook et al. (2017) examined the outcomes of a culturally responsive SEL program in promoting students' wellbeing and academic performance and reported significant improvements in academic engagement and wellbeing levels.

4. Limitations

It is worth referring to some of the limitations of this study. Such as, the short-term evaluation of the impact of the SEL intervention. This short term was related to the special circumstances of the COVID-19 pandemic, that resulted in changes in the instructional approaches, learning environment and students' attendance. As a result, evaluating the long-term impact of the SEL program was not possible. Therefore, there is a need for future studies that explore and evaluate the outcomes of SEL interventions in longitudinal terms within the Qatari and Arabic context. This long term evaluation can provide a better comprehensive understanding of the enduring benefits of social emotional interventions. Another limitation was the involvement of girls' students only in this study. This limitation can be addressed in future studies by including both girls and boys participants in order to explore the impact of social emotional interventions on both genders. Other limitations are related to the focus of the study. In this study, the focus was only on assessing the impact on wellbeing, not other markers of adjustment. This might limit the exploration of other factors that might contribute or hinder the expected changes. Furthermore, within this study, there were no attempts to assess how

well the program was implemented, rather, the focus was on the evaluation of the programs' impact. Thus, future studies should assess the functioning, delivery approaches, content, and instructional strategies in order to have the full picture of the SEL implementation process on the filed.

5. Conclusion

This study adds to the literature on the importance of social emotional interventions in addressing students' mental wellbeing. In a specific approach, this study represents the impact of implementing a culturally related social emotional intervention in an Arabic Qatari context on adolescents' levels of wellbeing. These results emphasise the need to initiate, implement and evaluate SEL interventions in the Qatari and different Arabic contexts in order to assess the outcomes, inform the educational policy and initiate a positive change in serving students' social emotional needs.

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Disclosure statement
No potential conflict of interest was reported by the author

Data availability statement
The data that support the findings of this study are available from the corresponding author, [Noor Al-Wattary, PhD.], upon reasonable request.

Ethical Approval
The ethical approval for this study was granted by the Ministry of Education and Higher Education in Qatar (reference number −92/2019). In addition, all participants were provided with consents that highlight their voluntary participation, how the data will be used in the research and how their confidentially will be maintained during and after the study.

Consent to participate
Furthermore, consents were obtained from the participants' parents in order to maintain the ethical standards within this study.

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