

The Influence of ‘Prompting for Value Ranking’ on Career Choices of Youth in the Gulf Arab World

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Abstract

The unequal distribution of qualified youth in different career disciplines is regarded by research as one of the main reasons for the severe labour market gaps as well as a shortage of opportunities for youth specialized in career disciplines with an exceeding labour supply for the labour demand. Recent studies show that a lack of synchronization of attribute values sought after and career choices, results in youth in the Gulf Arab world choosing career disciplines that are usually not in line with labour market opportunities that would satisfy those sought after attribute values. This study explored the influence of ‘prompting for value-ranking’ (i.e. prioritizing the importance of attribute values) on career choices of the youth in the Gulf Arab world. This intervention was tested using the following criteria enabling career decisions that would bring about better choice outcomes and higher decision quality, in terms of satisfaction, confidence and perceived fit of career choice with the decision maker’s preferences. Contrary to predictions based on existing research in the United States and Europe, career choices of Arab youth are likely to satisfy sought attribute values that were chosen when not prompted to rank values prior to making the decision, compared to those choices when prompted. The study’s findings indicated that Arab youth adopted heuristics theorized in Western decision science literature, together with indicators of the need

for customizing behavioural interventions for the Gulf Arab context.

While the Middle East faces the highest youth unemployment rate in the world at 25% (Kapsos & Sparrebom, 2011), recent research in the Arab world has been conducted to identify the possible causal factors for this increased youth unemployment (e.g. IFC, 2011; Abdul latif, Hamza, Rizk, Bizri, & Salama (2009); Tamkeen, 2010). This unemployment factor is also a result of the labour market gaps in certain fields (e.g. healthcare, hospitality, customer service) and a shortage of opportunities for youth in other fields, due to an exceeding labour supply (e.g. business and management, administration, accountancy); where one important causal factor identified in the research is the unequal distribution of qualified youth in different fields and areas. In addition, youth in the Arab world are found to show little recognition of the need for synchronizing career choices with values sought after in their career. Consequently, the majority of youth in the Arab world surveyed in a recent report indicated that if they could ‘go back in time’ to make their career path decisions again, they would make a different choice (IFC, 2011).

In designing interventions to enable decisions yielding more optimal results and higher satisfaction, research on consumer behaviour and decision processes has found that prompting respondents to rank their values prior to making their decisions

could bring about positive results.

This study aims to test whether the former ‘prompting for value-ranking’ would encourage youth to make better career choices. To elaborate, this study seeks to test whether prompting youth in the Gulf Arab world to rank attribute values that need to be considered in their career choices, prior to making their career choices would influence those choices they then consequently make. This is in terms of whether more career disciplines with labour demand are chosen and whether better decisions, with regards to post-choice satisfaction, confidence and fit with preferences, are made, compared to when these individuals were not prompted for ‘value-ranking’.

Presumably, with the integration of the attribute value ranking option prior to the decision making process, there is an increased likelihood that more youth in the Arab world would be satisfied with their decisions made (Chernev, 2003). In addition to individual implications on decision making processes, the consideration of values in career choices could potentially bring about broader policy implications for both the public and private sector. Given this, it is likely that more participants would recognize the satisfaction brought about by the presence of attribute values associated with otherwise disregarded career disciplines available. Hypothetically, this may also prompt youth to rank their values so that an increased percentage of youth in the Arab world would choose (or at least consider) career paths in disciplines



whether there is a labour supply need.

To elaborate on the above, 'prompting for value-ranking' is an example of a proposed behavioral intervention that attempts to 'nudge' or in other words, set up the right 'choice architecture' and influential social environment, so that decisions yielding the best results for the decision makers are made, and the more rational alternatives are chosen (Thaler & Sunstein, 2008). In their analysis of human behaviour, Kahneman & Tversky (1973) proposed that the decision making processes that we as humans tend to use (for career choices, every day matters, etc) are all usually an attempt to find our 'easy way out' of our decision problems. Whether it is be through choosing the 'best' amongst alternatives in alternative-focused thinking (Keeney, 1992), i.e. evaluating options until reaching the most satisfying option through 'satisficing' (Simon, 1978), or through making decisions based on one or certain number of aspects through 'lay rationalism' (Hsee, Zhang, Yu & Xi (2003), heuristics are used by people to entail low mental costs and less time (Keeney, 1992). The problem that naturally arises from such behavioral tendencies is that humans are not always able to make choices that would yield happiness or optimal consequential experiences (Hsee & Hastie, 2006). There are yet to be findings on optimal strategies for avoiding biases leading to sub-optimal decisions, or the tendency to adopt heuristic that do not yield 'happiness'. However, value-focused thinking has been proposed as an undermining approach for establishing guidelines in decision-making, whether through referring to personal past experiences or existing information available (Keeney, 1992).

One of the prompting for value-ranking approaches hypothesized and applied in literature is prompting decision makers to articulate their ideal attributes in a certain decision context. This intervention has been designed so that decision makers rank attributes associated with a certain decision in order of importance before going on to make choices (Chernev, 2003); a process through which respondents are reminded to consider attribute values to consider when making their consequent decisions.

Simultaneously, the prompting for value-ranking has been found to enable decision makers to formulate a mental articulation of their 'ideal point'. The ideal point is a 'combination of attributes and attribute values describing the ideal choice option for the decision maker' that would guide the decision maker to make a more informed decision (Carpenter & Nakamoto, 1989). In line with evidence from recent consumer research in various decision contexts such as that of buying a sofa, choosing a laptop, (Chernev, 2001, 2003; Klayman & Ha, 1987; Russo, Meloy & Medvec, 1998) the results of this research determined that allowing for ideal point availability would also increase the likeliness of decisions with higher reported rates of satisfaction and lower rates of regret (Chernev, 2003). While this intervention allows for a decision making process that first prompts for decision makers to think through what they want out of the choice, the importance of considering values when making career choices in determining how informed a decision is when made has been highlighted by literature in the US and Europe. This is in terms of allowing for value-focused thinking and encouraging decision makers to clarify the

relevant factors for assessing their career choices – a stage usually overlooked when mental shortcuts are adopted to reach decisions (Keeney, 1992; Wooler, 1982). This has sparked an interest in developing decision aids that raise the decision maker's awareness of these values during the decision making process (Wooler, 1982).

At the same time, research on youth career choices in the Arab world has highlighted the role played by the failure to meet Arab youth values in determining post-choice satisfaction and dissatisfaction. Moreover, ranking the opportunity to contribute to their countries as one of the top values sought after in a career by Gulf Arab youth suggests that an awareness of these values during the decision making process may encourage youth to consider options for which labour supply is lacking, that may be otherwise overlooked (IFC, 2011).

In terms of values within the domain of job opportunities, youth in the Arab world have ranked the following values with respect to career and the respective post-secondary educational choices in order of importance:

1. Job satisfaction
2. Good pay and opportunities for personal development
3. Broader contribution of ideal employer
4. Opportunity to work with talented people
5. Opportunity to contribute to development of my country (Asdaa, 2009; Little, 2010).

However, given that there is little recognition for the need for synchronizing career and relevant post-secondary choices with the former values sought after in their career, prompting for value rank-



ing could be tested as a behavioral decision aid that would establish a mental link between values sought after and career choices for youth in the Gulf Arab world - or at least an awareness of such a link (Wooler, 1982).

The need for such awareness of career and post-secondary choices would be applicable for both Arab youth and institutions in the Arab world. Despite research in the Arab world identifying the need for attribute values to be incorporated in such decision making processes, except for Bahrain there ironically exists no substantial available data published on labour market gaps and needs in the Arab world (Schwalje, 2009; Tamkeen, 2010). In addition to Schwalje's published attempts to identify such existing research, the author's experience in trying to reach organizations and foundations in the Arab world working to reduce youth unemployment were all in vain. Whether 'prompting for value-ranking' would allow for this awareness it could also provide an indication on whether 'nudges' or such behavioral interventions that attempt to encourage decision makers to make a certain choice, are applicable and effective in the Arab world. While behavioral interventions for better decisions have been found to be effective in Western societies (e.g. Thaler & Sunstein, 2008; Lenton, Fasolo & Todd, 2008, Volpp et al., 2008; Johnson and Goldstein, 2003; Kluger & DeNisi, 1998), including those involving the influence of values (e.g. Wooler, 1982; Ravlin & Meglino, 1987), it is yet to be proven whether this is the same in other cultures such as that of the Gulf Arab region. Considering that literature has found considerable differences in decision making processes between Western and Eastern cultures (or individualistic and

collectivistic cultures), this study's results would shed more light upon effectiveness of behavioral interventions similar to 'prompting for value ranking' in such decision making processes (Radford, Mann, Ohta & Nakane, 1993).

Given the proven significance of articulated attribute values in improving career choices (Wooler, 1982, Arvai, Gregory, & Mc-Daniels, (2001).; Miller & McGee, 2005), there are a number of predictions at this stage. The first is that 'prompting for value ranking' would motivate a higher number of youth in the study's sample to choose career disciplines characterized as labour market gaps. This prediction is built on the assumption that more youth are likely to recognize higher probability of satisfying sought after attribute values associated with such career disciplines (e.g. more opportunities in the labour market, higher labour demand, higher contribution to country's national development). The second prediction hypothesized is that 'prompting for value-ranking' would lead to an increase of the three variables tested (i.e. post-choice satisfaction, confidence and perceived fit with preferences), when compared to decisions made by youth in the Gulf Arab world who have not been prompted to rank attribute values.

In his study, Chernev (2008) found decision makers who were prompted to rank their values to have 'stronger preferences' for their chosen option, having articulated an ideal point to choose, therefore leading to post-choice confidence in their decisions and lower regret/dissatisfaction. To elaborate, the difference between Respondent A who had been prompted to rank attribute values and Respondent B, who had not been, is the dispersion of their attribute level preferences. Both

respondents would have mentally articulated attribute value preferences, even if vaguely, to be able to make a decision. However, Respondent B would trade off the different levels of each attribute, whereas Respondent A would have already articulated attribute trade-offs, prior to making the actual decision. Additionally, Respondent A would have a more comprehensive preference structure since he/she has articulated their preferences for each level. On the other hand, Respondent B would have a more selective preference structure in which only the top levels of each attribute would have been articulated. The stronger preferences and therefore choices made with greater confidence in the case of respondent A is predicted to lead to higher decision quality, at least in terms of subjective measures (Chernev, 2008). Figure 1 provides a brief illustration of the prediction explained. In adapting this prediction to the scope of this study, confidence, satisfaction as well as perceived fit of the chosen option with decision maker preferences that have a significant correlation with overall decision quality, are included in hypothesizing decision quality of choices made when prompted for value-ranking for career choices and relevant post-secondary choices (Aksoy, Cooil & Lurie, 2011).

Method

Design

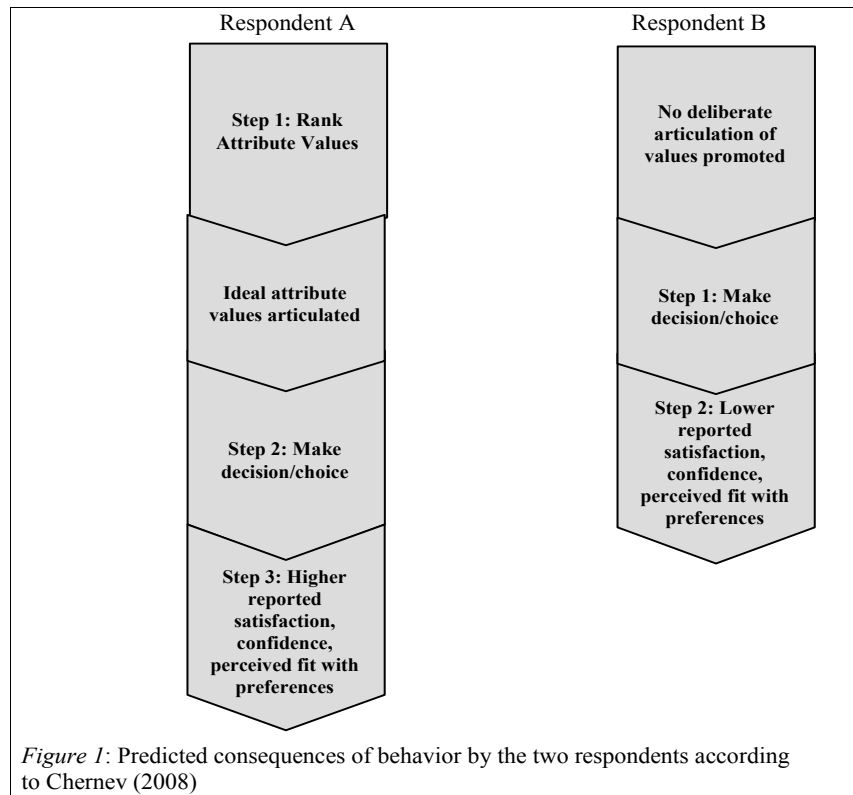
A one way randomized groups design was employed where two groups of participants were presented with a choice set of various career disciplines to choose as their future career path and educational program choice. One of these groups of participants were 'prompted to rank attribute values' by ranking the level of importance



they hold for each attribute value, before making their career decision. The other group started by directly choosing their desired career path discipline. Tables 1 and 2 illustrate how these conditions allow the research questions to be answered. The category of the career choice made (whether labour market gap or not), post-choice satisfaction, confidence and perceived fit with preferences were the dependent variables.

Participants

Participants ranged from high school students in their final year to university graduates. Participants needed to satisfy three conditions: (1) the participant had to be living in a Gulf Arab country (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia or the United Arab Emirates), (2) the participant had to fall within the age range of 16 to 25 years and (3) the participant was required to complete measures assessing the variables being studied. This uneven gender representation could possibly impact the results with respect to career choices and respective post-secondary choices especially in jobs that are traditionally more predominantly female or male dominated. Of the 107 participating youth, 90 met the above inclusion criteria. Participants averaged 21.5 years of age, the majority of participants were female (80%) and were mainly based in the United Arab Emirates (87%), as well as Bahrain and Saudi Arabia. More than half of participating youth were currently studying in university (60%), one third (30%) were graduates of either university or high school and were currently working, 11% were both graduates and job seekers, and the rest in their final years of high school.



Materials

The questionnaire presented online via LSE Qualtrics was used as the data collection tool. LSE Qualtrics is a research-specific software used for quantitative surveying in academic research at the London School of Economics (LSE). The author conducted all surveys and provided participants with a letter reiterating the purpose, confidentiality, informed consent and voluntary nature of the study.

Procedure and Stimuli

Participants of group A were first presented with a list of attribute values that were randomly ordered for each participant by the Qualtrics software, for which participants were required to rate the level of importance on a scale from 1 to 10 (1= least important, 10=most important) he/she held for each of the values in terms of influencing her career choice.

In line with prevalent stimuli presented to youth in the Gulf Arab world when choosing university degree programs or future career paths, options for the participant's choice of future career path were then listed (and randomized by Qualtrics for each participant) all together in one column on one display page. For group B, this page was the first page they were presented with.

Participants of both groups were then asked to rate their satisfaction, confidence and perceived fit of the choice made with their preferences on a scale from 1 to 10, with each of the respective three measures on separate display pages with the key measure in italics to avoid confusion or perceived repetition of any of three similarly framed questions.



Table 1

Condition Description

Career Choice Condition (IV)	Condition Description	
	Stimuli Present	Consecutive Variables Measured
A	Attribute Values Ranking and (followed by career disciplines options list	Subjective measures of decisions quality (satisfaction, confidence, perceived fit with preferences)
B	Career disciplines options list only	Subjective measures of decisions quality (satisfaction, confidence, perceived fit with preferences)

Table 2

Research Sub-questions and their Relation to Conditions

	Research Sub-question	Between Group Comparisons of Mean Response Times Required for:
Q1	Does being prompted for value ranking before making a career choice increase the likeliness of a labor market gap being chosen?	Number of labor market gaps chosen
Q2	Does being prompted for value ranking before making a career choice increase post-choice satisfaction with the decision made?	Number of choices after which above 5 (out of 10) level of satisfaction rated
Q3	Does being prompted for value ranking before making a career choice increase post-choice confidence with the decision made?	Number of choices after which above 5 (out of 10) level of confidence rated
Q4	Does being prompted for value ranking before making a career choice increase post-choice perceived fit of the career discipline just chosen with decision maker preferences?	Number of choices after which above 5 (out of 10) level of perceived fit of choice made with preferences rated

Measures

Articulation of ‘ideal attribute values’. The attribute values listed for participants of group A to rate are listed in Table 3 along with their relation to attribute values identified as most important to youth in the Arab world when pursuing a career (Asdaa,2009).

Two attribute values were listed in the survey in relation to the opportunity to contribute to the development of one’s country considering that emphasizing it is likely to encourage youth to fill labour market gaps (IFC, 2011). Participants were asked to assume that they were in the process of choosing

their future career path and to rate the importance they hold for each of the attributes when choosing their future career path. However, it was expected that this assumption may have an effect on survey responses of participant samples that had already completed post-secondary education, because they may have already made their career choices.

Career path choice. To allow for testing the first prediction, an equal number of disciplines witnessing a shortage of labour supply for demand and career disciplines witnessing a labour supply exceeding labour demand were required/ presented in the list. However, due

to the absence of substantial data on regional labour market gaps in the Gulf Arab region, the author improvised for this with the use of data on expatriate substitution required to fill certain disciplines to indicate the need for more local labour supply for those disciplines (Schwalje, 2009). Table 4 elaborates on this list. This improvisation may have affected survey responses and in an ideal situation, available substantial data may have provided more reliable survey responses.

The list therefore included eight disciplines that require expatriate substitution (i.e. fields that require filling labour demand with expatriate workforces, due to the



Table 3

Attribute values in survey's stimuli and their relation to research findings

	Attribute Value Listed in Survey Stimuli	Values of Arab Youth in Terms of Pursuing Careers (Asdaa, 2009)
1	Rate of pay	Good pay
2	Job Satisfaction	Job satisfaction
3	Level of demand in labor market	Opportunity to contribute to development of my Country
4	Opportunity to contribute to my country's development	Opportunity to contribute to development of my country and broader contribution of ideal employer
5	Opportunities for personal development	Opportunities for personal development and opportunity to work with talented people.

Note: The attribute values listed for participants of group A (the experimental group) to rate in order of importance are listed in Table 3 along with their relation to attribute values identified as most important to youth in the Arab world when pursuing a career (Asdaa, 2009).

absence of local talent and skilled labour) and eight career disciplines that do not (Baldwin-Edwards, 2011). The names of each career discipline were slightly modified with the help of leading recruitment agencies (Bayt.com, 2010), to suit labels that were more familiar to the Gulf Arab world. Participants were asked to assume that they were deciding on their future career path and then to choose the career discipline that described their chosen future path most accurately.

Decision Quality (in terms of Satisfaction, Confidence and Perceived fit with Preferences).

These three measures were chosen to assess decision quality given their relevance with regards to the limited scope of the study, given that the particular attribute values of each career discipline are not known here and specific individual decision maker preferences are not elicited (Aksoy et al., 2011; Clemen, 2008).

Control Variables. To control for differences in prevalent choice stimuli for choosing career paths and differences in education and professional settings, youth from only Gulf Arab countries (where choice stimuli and environments are similar) as opposed to

all Arab countries were included in the study (Schwalje, 2009; Baldwin-Edwards, 2011). Additionally, to control for variance in results due to significant age differences, only participants between the ages of 16 and 25 were included.

To ensure that the effect of prompting for value-ranking was tested, a group of the participants was selected as a control group. These participants were asked to answer the same survey as the rest of the participant sample, but without being prompted to rank their values.

Results

The results and raw scores for dependent and independent variables for both groups of participants are presented in Tables 5 to 8. Of particular interest, the greatest difference between the two groups' means is with the number of career disciplines chosen that happen to be labour market gaps, indicating a greater difference in the first dependent variable than the three others. To better understand the variance in results between the presence and absence of our behavioral intervention, an analysis of variance (ANOVA) with the recommendation of Lewis-Beck (1993) was conducted.

Q 1 – Does being prompted for value ranking before making a career choice increase the likelihood of the labour market gap being chosen?

Responses indicated significant differences between the experimental effect (group A) and the control group (group B) with regards to the number of career disciplines chosen witnessing a shortage in labour supply for demand. On the contrary, a less number of participants chose career disciplines witnessing a labour demand when prompted

to rank attribute values than when not. Given this, the first prediction appears to not be true

Q 2 – Does being prompted for value ranking before making a career choice increase post-choice satisfaction with the decision made?

Respondents' perceptions of satisfaction above 5 on the scale from 1 to 10 indicate insignificant differences between experimental effect group (group A) and control group (group B).

Q3 - Does being prompted for value ranking before making a career choice increase post-choice confidence with the decision made?

Respondents' perceptions of satisfaction above 5 on the scale from 1 to 10 indicate insignificant differences between experimental effect group (group A) and control group (group B).

Q4 – Does being prompted for value ranking before making a career choice increase post-choice perceived fit of the career discipline chosen with the decision maker's preferences?

Respondents' perceptions of satisfaction above 5 on the scale



Table 4

Deconstruction of list of career disciplines according to labor market demand in the Gulf Arab countries (Baldwin-Edwards, 2011).

	Career Discipline Listed	State of Discipline in the Gulf Labor Market
1	Law and legal services	Relatively higher labor supply
2	Healthcare: doctor	Labor market gap
3	Healthcare: nurse	Labor market gap
4	Healthcare: pharmacist	Labor market gap
5	Business and management	Relatively higher labor supply
6	Human resources	Relatively higher labor supply
7	Administration	Relatively higher labor supply
8	Electromechanical engineering	Relatively higher labor supply
9	Accountancy and finance	Relatively higher labor supply
10	Structural/civil engineering and architecture	Labor market gap
11	Hotel management and hospitality	Labor market gap
12	Information technology (IT)	Labor market gap
13	Education and training	Labor market gap
14	Art and design	Labor market gap
15	Public administration and defense	Relatively higher labor supply
16	Customer service	Labor market gap

from 1 to 10 indicate insignificant differences between experimental effect group (group A) and control group (group B).

Discussion and Implications

The goal of this study was to examine the influence of prompting participants to rank their values on career choices in the Gulf Arab world, in terms of the choices made themselves as well as subjective measures of decision quality. Significant prior research has shown the positive effects of behavioral interventions on decisions made by youth who are considering career and relevant post-secondary choices in the United States and Europe, and therefore broadly speaking (e.g. Thaler & Sunstein, 2008; Marteau, Ashcroft, & Oliver, 2009; Johnson & Goldstein, 2003; Kluger & DeNisi, 1998, etc.), this study also aimed to build on such empirical research and investigate how different the Gulf Arab world is in the applicability of behavioral interventions and decisions aids

such as this. Using a sample size of 90 participants from different Gulf Arab countries, this study attempted to test the influence of prompting for value- ranking on career choices through the functions of two variables: (1) its effect on the number of labour market gaps chosen by youth in the Gulf Arab world. It was assumed that if participants had been influenced by the importance ranking of their values, they would have been more likely to recognize the need to consider labour market gaps. (2) The quality of the decision, in terms of satisfaction, confidence and perceived fit with preferences. While there are obviously other factors that may influence these variables, this study is a crucial step in specifying the behavioral interventions that may influence those decision contexts for youth in the Gulf Arab world.

Q 1 – Does being prompted for value ranking before making a career choice increase the likeliness of the labour market gap being chosen?

The first objective of this

study was to determine whether prompting youth in the Gulf Arab world to rank attribute values before a career choice would increase the likeliness for career disciplines, characterized by being labour market gaps, to be chosen. In contrast to predictions, the most compelling finding is that youth in the Gulf Arab world are more likely to stick to more commonly chosen career disciplines than those with higher labour demands, when prompted to rank attribute values, compared to when not prompted to do so. Prompting for value ranking seems to have influenced decisions taken by youth surveyed in the Gulf Arab world, through decreasing their likeliness to choose labour market gaps. These labour market gaps are typically not prevalent chosen in the Gulf Arab world.

This reverse influence of the 'prompting for value' intervention on career choices re-emphasizes how foreign youth in the Gulf Arab world are to considering values when making career choices. From a practical perspective, the low



Table 5

Results of labor market gaps chosen as career path choices

Career Discipline	Scores (number of choices)	
	Group A	Group B
1 Education and Training	1	5
2 Healthcare: Doctor	2	7
3 Healthcare: Nurse	0	0
4 Healthcare: Pharmacist	0	0
5 Art and Design	1	1
6 Information Technology (IT)	4	1
7 Hotel Management	0	1
8 Structural/Civil Engineering and Architecture	2	2

Table 8

Results of perceived fit of choice made with preferences ratings

Rating (1/10)	Scores (number of participants)	
	Group A	Group B
1	0	0
2	1	1
3	0	0
4	2	1
5	4	3
6	5	3
7	10	8
8	10	14
9	5	7
10	8	7

Table 6

Results of post-choice satisfaction ratings

Rating (1/10)	Scores (Number of participants)	
	Group A	Group B
1	0	0
2	0	1
3	1	0
4	2	1
5	3	2
6	3	6
7	14	10
8	8	11
9	6	5
10	8	9

Table 7

Results of post-choice confidence ratings

Rating (1/10)	Scores	
	Group A	Group B
1	0	0
2	0	0
3	1	1
4	1	1
5	6	5
6	7	7
7	6	7
8	8	13
9	12	7
10	4	4

availability of information on labour market gaps and disciplines with higher labour demand suggests that a low awareness of career disciplines that would satisfy sought after attribute values such as contribution to national development, rate of pay and addressing demands in the labour market is prevalent.

In the author's view, the present findings do not necessarily suggest a complete disregard of value consideration in career decisions usually made by youth in the Gulf Arab world. However, it does shed light upon on the fact that even when taking attribute values into account, youth in the Gulf Arab world could still be misinformed on which career disciplines satisfy

those attribute values. This could be potentially leading to a higher adherence to career options that are prevalently chosen in the Gulf Arab world, primarily due to high social regard and reputation (Al Omran, 2012). Addressing the lack of research and statistical information on labour market gaps and attribute values and features of career disciplines with labour demands are critical for youth in the Gulf Arab world to make more informed career choices that would benefit the labour market (IFC, 2011). Moreover, the effect of myths that some occupations are 'better' or 'inferior' seem to be overriding an interest or consideration of labour market gaps and labour demands of certain disci-

plines. Therefore, despite the need for better information on labour market gaps in the Gulf Arab region, the power of word of mouth in shaping reputations of career disciplines in Arab societies could potentially override the influence of prompting for value ranking even with higher availability of information in the Arab world (Yousef, 2004; IFC, 2011). The influence that word of mouth on career choices of youth in the Gulf Arab world can be further explored and studied to provide a clearer view of the factors affecting their career choices.

Q 2 – Does being prompted for value ranking before making a career choice increase post-choice



satisfaction, confidence and perceived fit of the decision with decision maker preferences?

While the reverse effect of the prompting behavioral intervention may be a result of the above mentioned fact of low information on attribute values of different career disciplines, particularly those that are characterized by being labour market gaps, the indifference in subjective measures of decision quality (satisfaction, confidence and perceived fit with preferences) may actually be a potential indicator of the inapplicability of behavioral interventions or 'nudges' in the Gulf Arab world.

It would be fair to assume that even if the reverse effect of prompting for value-ranking was caused by low information on attribute values of career disciplines, there would still be a difference in satisfaction, confidence and perceived fit with preferences; in this case, perhaps lower scores for the mentioned three variables for the group making their career choices after ranking their sought after attribute values, due to being uncertain on whether their decisions would satisfy their sought after attribute values or not. This assumption is based on the tendency of humans to be loss averse when facing the uncertain (Kahneman & Tversky, 1984). On the other hand, it is logical to assume that these subjective measures of decision quality would have been higher for this same group if participants truly believed that their choice of career disciplines that are prevalently chosen in the Gulf Arab world would satisfy the level of attribute values they are seeking in their career paths. However, the results that oppose these assumptions could be due to participants being unaccustomed to considering values when making a career deci-

sion as previous research in the Arab world has shown (IFC, 2011). Here, the need for further research into behavioral interventions and measures that would be of higher effectiveness, familiarity and meaning to youth in the Arab world is evident. Additionally, the need for the Arab world to customize and develop behavioral interventions to suit their own contexts and cultures is important to determine effectiveness of measures, rather than immediate use of interventions suggested in US and Europe literature, as research in other cultures such as Japan and India have also shown (Mann, Radford & Kanagawa, 1985; Radford et al., 1993; Tipandjan, 2010).

Despite establishing the need for measures to be customized to the Gulf Arab world, this study does highlight behaviour that may indicate common similarities to heuristics and mental shortcuts theorized and found in Western literature. For instance, the discovered reverse effect of the prompting for value ranking intervention, points at several heuristics that could have been adopted by participants. When uncertain of whether prioritized values were satisfied by career disciplines with labour demands, participants adhered to familiar career disciplines and were salient to what seemed unfamiliar. This served as a mental shortcut to narrow down options of career disciplines in the presented list. In other words, participants seemed to 'satisfice' or choose the alternative that seemed familiar to them due to low information (Simon, 1978). Additionally, with the pressure of increased perceived accountability associated with the decision-making, people are more likely to look to be perceived as rational to their societies; to adjust their beliefs rather than their behaviors to maintain

this, therefore choosing usually chosen career disciplines rather than taking the risk of choosing career disciplines that could potentially satisfy attribute values, but would be unfamiliar to the Gulf Arab world (Dolan, Hallsworth, Halpern, King, & Vlaev (2010).

The recognition of the significance of cultural context of behavioral interventions is hardly new as cited above, but this study emphasizes this fact, taken together, with the need for referring to literature in the United States and Europe literature to build on similarities in behavioral decision making. The findings of this study, however, primarily address a more critical issue than the importance of context; the ineffectiveness of such behavioral interventions due to an absence of consideration of values and solid information in career choices of youth in the Gulf Arab world.

While several control variables were integrated and stimuli lists were randomized to reduce potential biases, there is a chance that prior experiences, pre-determined decisions relating to participants' career paths may have produced a bias toward the chosen career disciplines and results. Another limitation of the results of this study with regards to influence of prompting for value-ranking on career choices is the fact that other influential factors in Arab countries for which very limited control is possible could have overridden effects caused by the prompting for value ranking intervention. The factors are such as those associated with Arab countries being part of a collectivist culture; holding more value to influence of others in community and society (Stewart, 1986; Mann et al., 1985; Radford et al., 1993; Tipandjan, 2010).



Moreover, the nature of the study's method of research may have posed an additional limitation that future researchers should be aware of. Being a cross-sectional study, the survey results used to reach the study's conclusions face a potential threat to its internal validity, where causality between variables to identify causes and effects, is hard to identify (Brutus and Duniewicz, 2012). A longitudinal study in the future with a greater sample size would perhaps confirm results and guarantee a higher statistical validity. Given the small sample size, these results should be regarded as preliminary but used as a foundation for future interventions to improve career decision quality in the Gulf Arab world. Furthermore, despite efforts in compensating for the absence of solid information on career choices and their attribute values, it is worth noting that this lack of substantial data may have posed an additional challenge for the reliability of both the experimental design as well as participants' responses. Having said this, it is important that statistical information and data be improved and accessible in the Arab world to enable substantial studies to be conducted in the future.

Conclusion

To summarize, the results presented in this study provide a test of a behavioral intervention for the consideration of values in career choices as postulated by literature on the role of ideal point availability and value-focused thinking in determining better decision making. The results provide significant support for research claiming differences in the mechanisms of influence of behavioral interventions in decisions contexts in different cultures and

countries, and, at the same time, points to potential indicators of similarities in heuristics and mental shortcuts adopted by people. The validity of the reverse effects of 'prompting for value ranking' is very likely to be context-rich and not necessarily generalizable to Gulf Arab youth at future points in time due to the possibility of determining factors being associated with the current state of data availability and awareness of attribute values.

On the other hand, this context-rich nature of results highlights a consideration not emphasized enough in literature world – that is, the potential fluctuation of the effectiveness of certain 'nudges' or behavioral interventions. This is because use of behavioral interventions assumes that decision makers have a certain degree of knowledge or awareness that would enable decision makers to 'determine/select' the best choice outcome. In the case of interventions where this awareness or knowledge is absent, behavioral interventions may not always be as effective (Fasolo and Bonini, 2010). Given evidence here, the Gulf Arab world should primarily focus on better information and awareness of prerequisite conditions (i.e. attribute values of career disciplines and labour market gaps) before applying further interventions for better career decisions.

Table 4: Deconstruction of list of career disciplines according to labour market demand in the Gulf Arab countries (Baldwin-Edwards, 2011).

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