Foundation University Journal of Psychology
Vol 9, No.1 (January, 2025)

FUJP Open Access Journal

Research Article 10.33897/fujp.v9i1.751

True Leaders Never Stop Learning: Relationship between Intellectual Humility, Decision Making Self-Esteem, Decision Making Styles and Occupational Wellbeing among Educational Leaders

Ghania Naveed[1], Sardar Asma Eman[1], Ayesha Khan[1], Farah Shamim[1]
1. Psychology Department, University of Wah, Wah Cantt.
For Correspondence Ghania Naveed. Email: ghmn006@gmail.com

Abstract

Background. Present study was aimed to examine relationships between intellectual humility, decision making self-esteem, decision-making styles and occupational wellbeing among educational leaders. Furthermore, predicting role of intellectual humility and decision making self-esteem on decision making styles have been focused.

Method. A sample of 150 Head of department of universities and principals of colleges (aged 25-60 years) were selected belonging to different universities and colleges of Attock, Hasanabdal, Wah Cantt, Taxila, Rawalpindi, and Islamabad. Comprehensive Intellectual Humility Scale (Krumrei-Mancuso & Rouse, 2016), Decision-Making Self-Esteem Scale (Mann et al., 1997), Melbourne Decision-Making Questionnaire (Mann et al., 1997) and Work-Wellbeing Scale (Parker & Hyett, 2011) were used to measure research variables.

Results. Results showed that intellectual humility has significant positive relationship with decision making self-esteem, work satisfaction and vigilance style. Intellectual humility and decision making self-esteem significantly predict vigilance among educational leaders. On hypervigilance, the mean of educational leaders with less income comparatively to other groups is greater than mean of these groups.

Keywords. Intellectual humility, decision making self-esteem, decision-making styles, occupational wellbeing, educational leaders

Foundation University Islamabad

Introduction

For many years, universities and colleges have been the driving force behind societal change through advanced education. Their purpose has always been to serve as self-contained institutions that benefit society by expanding knowledge and educating the next generation.

Universities and colleges operate under the supervision, leadership, and vision of their academic leaders. During the planning, implementation, and evaluation of everyday duties, educational leaders are always involved in making decisions (Ahmed & Al-Dhuwaihi, 2020). They take decisions on how the departments will be organized, who will be leading the workforce, who will evaluate the performance of the faculty, vacation timings, controlling the problematic behaviors of employees and job rotation schedule (Hitt et al., 2006).

Moreover, modern workplace sector is driving a demand for continuous skill and knowledge development and put a great strain on leaders to keep pace with time (Lopez, 2012). True leaders are lifelong learners and consider all experiences to be learning opportunities (Kouzes & Posner, 1995, as cited in Lopez, 2012). They have receptive minds that embrace innovative viewpoints as opposed to closed ones that reject them (Daft, 2014).

Intellectual humility can be characterised as a non-threatening recognition of one's own intellectual fallibility, as well as an openness to alternative perspectives that may differ from one's own viewpoints ((Krumrei-Mancuso & Rouse, 2016; Porter & Schumann, 2018). Leaders who reported greater regard for different points of view, which is a sign of intellectual humility, had followers who were more content with their leader's interpersonal leadership and justice attitude (Krumrei-Mancuso & Rowatt, 2021).

Therefore, leaders having intellectual humility can bring wonders in educational settings. These higher educational institutes can't run smoothly without humble and efficient educational leaders who took rational decisions for their institutions. But sometimes, searching for alternatives, investigating and locating them, and weighing the merits and drawbacks of their decisions becomes a complex process which may cause decisional conflict and stress (Narangerel & Semerci, 2020). The literature review enhanced the nature and concept of intellectual humility, however intellectual humility among educational leaders in Pakistan have not been studied yet. So, the present study aims to explore the relationship between intellectual humility and various decision-making styles (e.g., vigilance, hypervigilance, buck-passing, and procrastination), among educational leaders in different colleges and universities in Pakistan, as this relationship received little attention in Pakistani context.

Janis and Mann (1979) sophisticated the notion in their conflict-theory model of decision making process that decision making entitles a struggle that generates stress. Stress results from the decision maker's choice causing any personal, objective, subjective or material loss and this can cause decrease in one's self-esteem (Janis & Mann, 1977, as cited in Narangerel & Semerci, 2020). The inflated stress level bring outcome in elevated choice for abnormal decision making styles and poor decision results (Mann et al., 1997, as cited in Fiaz, 2021). In contrast, evidence also showed that self-assured individuals are more successful in making effective decisions and dealing with scenarios of making decisions (Mağden & Küçük, 1993, as cited in Coruh & Vural, 2019). Present study aims to investigate how decision-making self-esteem affects the decision-making styles of educational leaders in Pakistani context.

According to Janis and Mann's model, three predecessor conditions that determine the conflicts in decision making include awareness that it is a serious risk if nothing is done, quest and hope of discovering a better option and belief of having enough time in hand in order to evaluate, understand as well as assess the situation at hand and generate and choose the best possible alternative. Four patterns emerge as a result are procrastination, buck-passing, hypervigilance and vigilance (Mann et al., 1997, as cited in Fiaz, 2021).

Ideal pattern of decision making is vigilance decision making in which decision maker go in depth for the relevant information, pick information in an unbiased manner and evaluate carefully all the alternatives before taking a decision (Janis, 1982, as cited in Filipe et al., 2020). Vigilant decision makers believe in having an adequate time for the better alternatives and they do not avoid responsibility.

However, unexpected threat or time pressure conditions give rise to an anxious way of decision making i.e., hyper vigilant pattern of behavior. To release stress immediately, the person makes an abrupt choice (Ding et al., 2020).

While some individuals often leave decisions to others and show avoidant behavior in deciding, known as buck-passing. Procrastination is also another maladaptive coping strategy (Isaksson et al, 2014). It includes lowering priority by deferring decisions for later (Urieta et al, 2021).

However, evidence showed that intellectually humble people have an accurate view of themselves and their intellectual limitations, so their decision-making power is strong, they can make decisions using various innovative styles, and they are well-adjusted in their occupational settings (Davis et al., 2016).

A leader's occupational well-being can also be a key factor in determining organizational effectiveness. Occupational well-being is defined as feeling safe, healthy, and productive in the workplace (Parker & Hyett, 2011). Work satisfaction is considered as one of the important dimensions of occupational well-being, involving how individuals perceive their job fulfillment and whether work enhances their well-being, provides meaning in their lives, and improves their skills. Conversely, individuals may experience stress and pressure, finding it challenging to meet targets and "wind down" after work, which can impact their self-esteem (Parker & Hyett, 2011).

Also the decision making process can act as a huge contributor to the efficiency, productivity and satisfaction at a workplace. Different decision-making styles help worker to do a task in more productive ways even in stress provoking situation (Demerouti et al., 2001, as cited in Salvagioni, 2017). Such individuals will get positive feedback at the end of task accomplishment, increasing their work-efficiency and well-being, especially occupational well-being (Halbeslenben, 2010, as cited in Bayhan, 2020).

Objectives

1. To explore the relationship between intellectual humility and decision making self-esteem and decision making styles of educational leaders.
2. To explore the relationship between decision making self-esteem and decision making styles of educational leaders.
3. To investigate intellectual humility and decision making self-esteem as predictors of decision making styles among educational leaders.

Hypotheses

1. There will be a positive relationship between intellectual humility and vigilance decision making style of educational leaders.
2. Decision making self-esteem will be positively related with vigilance decision making style among educational leaders.
3. Intellectual humility and decision making self-esteem will significantly predict vigilance decision making style among educational leaders.

Method

Research Design

A descriptive-predictive research design was carried out in the present study. The study was quantitative in nature.

Sample

It is a cross-sectional study and sample consisted of 150 educational leaders. There were both males (*N*=89, 59.33%) and females (*N*=61, 40.66%) in the study. Participants with age range 31-40 years have more participation rates (38.0%) than other age groups. In this sample most of the participants (78.7%) have post-graduate level education. 57.3% participants were from joint family system which is greater than participation rate of participants with nuclear family system (42.7%). Mostly participants (82.0%) were married. Most number of participants were from government sector (48.7%) as compared to participants from private (42%) and semi-government (9.33%) sectors. Mostly participants (62.7%) have monthly income from 50K to 1Lac. 28.7% participants have job experience of 11-15 years and have high participation than other job experience groups. Data was collected from different educational institutions such as colleges and universities of Wah Cantt, Taxila, Attock, Rawalpindi, and Islamabad.

Inclusion Criteria

The sample consisted of both males and females educational leaders, ranging in age from 25-60 years.

Exclusion Criteria. The participants who gave incomplete responses were excluded from the study.

Sampling Technique

Participants were approached using purposive sampling technique.

Assessment Measures

Comprehensive Intellectual Humility Scale (CIHS). The Comprehensive Intellectual Humility Scale (CIHS; Krumrei at el., 2016) is 22-item self-report measure of intellectual humility. Items are rated on a 5-point Likert scale. Items 1, 2, 3, 4, 5, 12, 16, 17, 18, 21 and 22 are reversed scored. Scores can range between 22 and 110, with higher scores indicating more IH. The measure has shown adequate levels of validity and reliability. The scale's coefficient alpha was .88 (Krumrei at el., 2016).

Decision-Making Self-Esteem Scale. The DMQ-I is a scale that aims to assess individual's self-esteem as a decision maker. It consists of 6 items, rated on a 3-point Likert Scale. Items 2, 4 and 6 are reverse scored. Higher scores indicate greater confidence in one's ability to make decisions. The measure has shown adequate levels of validity and reliability. The scale's Cronbach alpha coefficient was found to be .74 (Mann et al., 1997, as cited in Filipe et al., 2020).

Melbourne Decision Making Questionnaire (MDMQ II). The Melbourne Decision Making Questionnaire (Mann et al., 1997) is a four-dimensional scale for assessing decision-making styles based on Janis and Mann's conflict theory of decision-making (1977). It consists of total 22 items, scored on three-point Likert scale with following options: not true for me=0, occasionally true=1, and true for me=2. The measure has shown adequate levels of validity and reliability. The DMQ-2 has a reliability of 0.80, 0.87, 0.81, 0.74 for its respective sub scales i.e. vigilance, buck-passing, procrastination and hypervigilance sub-scale (Mann et al., 1997, as cited in Filipe et al., 2020).

Work Wellbeing Questionnaire. It is 31-item self-administered questionnaire developed by Parker and Hyett (2011) that aims to assess workplace/ occupational well-being through individuals' present and most relevant work situations. There are four sub-scales in this scale: (Work Satisfaction, Organizational Respect, Employer Care and Intrusion of work into Private Life). The 2 sub-scales that were selected to use in the present study to assess occupational wellbeing were work satisfaction and intrusion of work into private life. Items are scored on a 5-point Likert Scale, with options ranging from 0 to 5 (not at all, 1 to slightly true, 2 to moderately true, 3 to very true, and 5 to extremely true). This scale has a 0-155 scoring range, with a greater score indicating a higher level on that sub-scale. This scale has only one reversed score item (Item 30 of Intrusion of Work into Private Life sub-scale). The measure has shown adequate levels of validity and reliability. The scale's overall reliability was found to be coefficient alpha 0.83, for work satisfaction sub-scale its 0.85 and 0.78 for intrusion of work into private life subscale (Parker & Hyett, 2011).

Procedure

Permission was obtained from the authors of the scales, University administration, and official authorities of each institute as an essential need for data gathering in order to regulate the research's ethical standards. Data collected from a sample of total 150 participants. They were approached individually and given a questionnaire after confirming their willingness. The data was collected from different universities and colleges of Wah Cantt, Taxila, Hasan Abdal, Attock, and Islamabad. Before participation, consent form was given to be signed. They were informed that the information they submitted will be solely utilized for research purpose and kept anonymous and confidential. Additionally, participants were assured that they could withdraw at any moment and that their decision would be respected. All the participants were thanked for their participation. The data was then statistically analyzed using SPSS 23.0 to obtain the results.

Results

The results were analyzed by using SPSS (23.0), Mean and reliabilities of study variables were calculated in descriptive statistics. Correlation analysis was done to find out the relationship between study variables. Multiple hierarchical regression was done to find out the impact of predictors intellectual humility and decision making self-esteem on vigilance decision making style. Demographic variable (i.e. income) was explored using ANOVA.

Table 1

Mean, Mode, Median, Standard Deviation, Alpha Reliability Coefficient for Intellectual Humility, Decision Making Self-Esteem, Decision Making Styles, and Occupational Wellbeing (N=150).

Variables	K	α	Mean	S.D	Range		Kurtosis	Skewness
					Potential	Actual		
IH	22	.76	74.92	8.56	22-110	47	-.033	-.07
IOIAE	5	.85	17.15	4.17	5-25	17	-.63	-.30
OTROV	5	.57	18.35	2.82	5-25	15	-.04	-.24
RFOV	6	.77	23.25	3.56	6-30	21	1.57	-.70
LOIOC	6	.61	16.16	3.41	6-30	17	-.28	.16
DMSE	6	.58	08.25	2.16	0-12	9	-.66	-.33
DMS	22	.80	21.31	7.05	0-44	42	1.28	1.30
VG	6	.84	09.01	2.93	0-12	10	-.74	-.68
BP	6	.74	04.65	2.85	0-12	11	1.39	.82
PR	5	.82	03.41	2.93	0-10	9	1.48	1.03
HV	5	.75	04.23	2.68	0-10	9	1.71	.87
OWB	17	.73	37.36	8.14	0-68	43	-.022	-.16
WS	10	.91	26.15	7.37	0-40	36	.11	-.63
IOWIPL	7	.76	11.21	5.54	0-28	26	-.77	.35

Note. IH = Intellectual Humility, IOIAE = Independence of Intellect and Ego, OTROV = Openness to Revising One's Viewpoint, RFOV = Respect for Others Viewpoints, LOIOC = Lack of Intellectual Overconfidence, DMSE = Decision Making Self-esteem, DMS = Decision Making Styles, VG = Vigilance, BP = Buck-passing, PR = Procrastination, HV = Hyper-vigilance, OWB = Occupational Well-being, WS = Work Satisfaction, IOWIPL = Intrusion of Work into Private Life, K = Number of Items, α = Cronbach Alpha Reliability, S.D = Standard deviation.

Table 1 indicates the number of items, reliability, mean, mode, median, standard deviation, range (potential and actual range), skewness and kurtosis. The alpha coefficient of all the scale and subscales ranges from .57 to .91 indicating that they are valid for further analysis. It is clear from the table that all the scales and subscales have their skewness and kurtosis value within range of -2 and +2 and thus fulfilling the assumption of normal distribution.

Table 2

Pearson Correlation between Intellectual Humility, Decision Making Self-Esteem, Decision Making Styles and their subscales among Educational Leaders (N=150).

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
IH	1	-	-	-	-	-	-	-	-	-	-	-	-
IOIAE	.74**	1	-	-	-	-	-	-	-	-	-	-	-
OTROV	.45**	.02	1	-	-	-	-	-	-	-	-	-	-
RFOV	.65**	.25**	.40**	1	-	-	-	-	-	-	-	-	-
LOIOC	.52**	.30**	-.04	-.02	1	-	-	-	-	-	-	-	-
DMSE	.18*	.30**	.03	.22**	-.20*	1	-	-	-	-	-	-	-
DMS	.07	-.04	.10	.07	.07	-.12	1	-	-	-	-	-	-
VG	.38**	.38**	.10	.30**	.09	.45**	.14	1	-	-	-	-	-
BP	-.00	-.09	.01	-.08	.15	-.25**	.79**	-.15	1	-	-	-	-
PR	-.10	-.14	.09	-.07	-.07	-.31**	.78**	-.32**	.64**	1	-	-	-
HV	-.12	-.29**	.03	-.00	.00	-.22**	.77**	-.19*	.49**	.63**	1	-	-
OWB	-.08	-.09	-.03	.10	-.14	.08	-.04	-.02	-.02	-.04	-.01	1	-
WS	.18*	.10*	.01	.23**	-.07	.35**	-.07	.28**	-.11	-.18*	-.15	.74**	1
IOWIPL	-.32**	-.39**	-.07	-.17*	-.12	-.37**	.01	-.41**	.12	.17*	.18*	.48**	-.23**

Note. IH = Intellectual Humility, IOIAE = Independence of Intellect and Ego, OTROV = Openness to Revising One's Viewpoint, RFOV = Respect for Others Viewpoint, LOIOC = Lack of Intellectual Overconfidence, DMSE = Decision Making Self-Esteem, DMS = Decision Making Styles, VG = Vigilance, BP = Buck-passing, PR = Procrastination, HV = Hypervigilance, OWB = Occupational Well-being, WS = Work Satisfaction, IOWIPL = Intrusion of Work into Private Life.

*$p<.05$, **$p<.01$, ***$p<.001$.

Table 2 demonstrates the relationship between intellectual humility (and its sub-scales independence of intellect and ego, openness to revising one's viewpoint, respect for others viewpoint, lack of intellectual overconfidence), decision making self-esteem, decision making styles (vigilance, buck-passing, procrastination, hypervigilance), occupational well-being and its subscales (work satisfaction, intrusion of work into private life). Results indicate that intellectual humility has significant positive relationship with openness to revising one's viewpoint, respect for others viewpoint, lack of intellectual overconfidence, decision making self-esteem, vigilance and work satisfaction. Intellectual humility is significantly negatively related with intrusion of work into private life. Decision making self-esteem is significantly positively related with intellectual humility, independence of intellect and ego, respect for others viewpoint, vigilance, work satisfaction, decision making styles and non-significant with occupational well-being. Decision making self-esteem is significantly negatively related with lack of intellectual overconfidence, buck passing, procrastination, hyper vigilance, intrusion of work into private life. Decision making styles is significantly positively related with buck passing, procrastination and hyper vigilance. Occupational well-being is significantly positively related with work satisfaction and intrusion of work into private life.

Table 3

Hierarchical Multiple Regression Analysis predicting Vigilance Decision-Making Style from Intellectual Humility and Decision Making Self-Esteem (N=150).

Predictors	R^2	ΔR^2	B	*B*	*S.E*	*p*	*F*	95% CI	
								LL	UL
Model 1	.18	.16					8.15***		
Constant				1.09	2.07	.60		-3.01	5.19
IOIAE			.32	.23	.06	.00		.11	.34
OTROV			.01	.01	.09	.90		-.16	.18
RFOV			.21	.17	.07	.01		.03	.31
LOIOC			-.01	-.01	.07	.88		-.15	.12
Model 2	.30	.28					24.71***		
Constant				-2.60	2.06	.21		-6.67	1.48
IOIAE			.19	.13	.06	.02		.02	.24
OTROV			.03	.03	.08	.73		-.13	.18
RFOV			.15	.13	.07	.06		-.00	.26
LOIOC			.10	.09	.07	.17		-.04	.22
DMSE			.39	.52	.11	.00		.32	.7

Note. IOIAE = Independence of Intellect and Ego, OTROV = Openness to Revising One's Viewpoint, RFOV = Respect for Others Viewpoints, LOIOC = Lack of Intellectual Overconfidence, DMSE = Decision Making Self-Esteem, CI = Confidence Interval, LL= Lower Limit, UL= Upper Limit, ΔR^2 = Change in R^2, β = Standardized Regression Coefficient.

**p <.05, **p<.01. ***p<.001*

Table 3 shows impact of intellectual humility (independence of intellect and ego, openness to revising one's viewpoint, respect for others viewpoints, lack of intellectual overconfidence) and decision-making self-esteem on vigilance decision making style in educational leaders. Model 1 explains 18% variance in vigilance decision making style, and model 2 indicates 30% variance in vigilance decision making style.

Table 4

One-Way ANOVA to Check Monthly Income Differences at various levels in relation to Study Variables among Educational Leaders (N=150).

	Categories of Income								
	50K to 1 lac		1lac to 2lac		2lac and above				
Variables	M	S.D	M	S.D	M	S.D	F	*p*	η2
IH	74.18	8.856	75.22	7.920	80.00	7.197	2.359	.098	-
IOIAE	16.74	4.372	17.51	3.882	19.18	3.027	1.936	.148	-
OTROV	18.27	2.799	18.51	2.744	18.45	3.588	.121	.886	-
RFOV	22.99	3.797	23.53	3.245	24.36	2.501	.931	.397	-
LOIOC	16.18	3.382	15.67	3.490	18.00	2898	2.105	.125	-
DMSE	8.21	2.318	9.11	1.886	8.73	1.348	2.732	.068	-
DMS	22.18	7.719	19.51	5.247	21.18	6.539	2.222	.112	-
VG	9.01	2.960	9.22	2.713	8.18	3.628	.554	.676	-
BP	4.74	3.058	4.20	2.361	5.64	2.873	1.268	.285	-
PR	3.74	3.072	2.60	2.320	3.91	3.534	2.537	0.83	-
HV	**4.68**	**2.787**	**3.49**	**2.212**	**3.45**	**2.979**	**3.612**	**0.29**	**0.22**
OWB	36.82	8.036	38.58	8.050	37.00	9.581	.719	.489	-
WS	25.65	7.704	27.11	6.386	26.15	7.378	.611	.544	-
IOWIPL	11.17	5.341	11.47	6.040	10.45	5.574	.151	.860	-

Note. IH = Intellectual Humility, IOIAE = Independence of Intellect and Ego, OTROV = Openness to Revising One's Viewpoints, RFOV = Respect for Others Viewpoint, LOIOC = Lack of Intellectual Overconfidence, DMSE = Decisional Self-Esteem, DMS = Decision Making Styles, VG = Vigilance, BP = Buck-passing, PR = Procrastination, HV = Hyper-vigilance, OWB = Occupational Well-being, WS = Work Satisfaction, IOWIPL = Intrusion of Work into Private Life, **p*<.05, ***p*<.01, ****p*<.000.

Table 4 demonstrates that statistically significant differences exist across monthly income relations to intellectual humility, independence of intellect and ego, openness to revising one's viewpoint, respect for others viewpoint, lack of intellectual confidence, decision-making self-esteem, decision making styles, vigilance, buck-passing, procrastination, hypervigilance, occupational well-being, work satisfaction, intrusion of work into private life among educational leaders. F values are significant for the variables; therefore, post-hoc analyses are required for pairwise comparisons. As sample with respect to categories of monthly income suggested post-hoc method in this case is Games-Howell test (field 2000).

Table 5

Pairwise Comparison across Monthly Income with respect to Hypervigilance among Educational Leaders (N=150).

Variable	(i) Monthly Income	(j) Monthly Income	i-j	*B*	*P*	95%CL	
						LL	UL
HV	50k to 1lac	1lac to 2lac	1.19*	.43	.02	.15	2.23
		2lac and above	1.22	.94	.42	-1.29	3.74
	1lac to 2lac	50k to 1lac	-1.19*	.43	.02	-2.23	-.15
		2lac and above	.03	.95	.99	-5.50	2.56
	2lac and above	50k to 1lac	-1.22	.94	.42	-3.74	1.29
		1lac to 2lac	-.03	.95	.99	-2.56	2.50

Note. HV = Hyper Vigilance, I-J = Mean Difference, *B* = Standard Error, CI = Confidence Interval, LL = Lower Limit, UL = Upper Limit, **p*<.05, ***p*<.01, ****p*<.000.

Table 5 demonstrates that statistically significant differences exist across monthly income, in relation with hypervigilance decision making style. On hypervigilance, the mean of people with 50k to 1lac is greater than people with 1lac to 2lac. The mean of people with 1lac to 2lac is greater than people with 2lac and above.

Discussion

The present study highlights the importance of intellectual humility, decision making self-esteem, decision making styles and occupational well-being among educational leaders. The main objectives of the present study include (a) to investigate the relationship between the study variables; intellectual humility, decision making self-esteem and decision making styles of educational leaders (b) to investigate the impact of intellectual humility and decision making self-esteem on decision making styles. Descriptive measurements were calculated for scales and subscales of the present study. The scales had skewness values between -2 to +2 which lies in normal range (Miles & Shevlin, 2001). Alpha reliabilities of all the scales were found to be satisfactory (Table 1).

The relationship between the study variables was determined by finding correlation estimates (Table 2). The findings indicate that intellectual humility is significantly positively related with vigilance decision making style (Table 2), as findings supported the hypothesis 1: *"There will be a positive relationship between intellectual humility and vigilance decision making style of educational leaders."* These results are supported with the previous literature as it showed that people who have high intellectual humility will respect others view point, consider all alternatives and when warned they will surely revise their view points (Krumrei-Mancuso & Rouse, 2016). They are open minded, go for many different viewpoints, evaluate evidences and vigilant about their wrong beliefs which is motivated by detestation for being wrong (Leary, 2017).

The correlation estimates for decision making self-esteem indicated that decision making self-esteem is significantly positively related with vigilance decision making style (Table 2). The findings supported the hypothesis 2: *"Decision making self-esteem will be positively related with vigilance decision making style among educational leaders."* The results are consistent with previous research that showed that decision making self-esteem has a positive relationship with adaptive decision making style i.e. vigilance (Burnett, 1991; Mann et al., 1998 as cited in Narangerel & Semerci, 2020). And if a person score low on decisional self-

esteem than he will make worse decisions (Phillips & Ogeil, 2017).

The present study also hypothesized that**:** *"Intellectual humility and decision making self-esteem will significantly predict vigilance decision making style among educational leaders"*. The findings supported the hypothesis 3 (Table 3), as regression analysis indicates total 30% variance in vigilance decision making style by predictors intellectual humility and decision making self-esteem. The results are consistent with the previous literature as humble people have an accurate view of themselves and their limitations related to their skills and capabilities, so their decision-making power is strong, they can make decisions using various innovative styles, and they are well-adjusted in their occupational settings (Davis et al., 2016). People with high intellectual humility are open minded, go for many different viewpoints, evaluate evidences and vigilant about their wrong beliefs which is motivated by detestation for being wrong (Leary, 2017).

Additional Findings

Additional findings showed that intellectual humility has slightly negative relationship with occupational wellbeing among educational leaders (Table 2). This suggested that Principals of colleges and Head of Departments of universities can easily suffer from burnout and stress as a result of the increased burden and load of work that comes with the increased responsibility of positions designated to them, affecting their working capabilities such as decision-making and analysis of the situation at hand, which has a negative impact on their wellbeing (Sonnentag, 2015). However, findings also showed significant positive relationship between intellectual humility and one of the dimension of occupational wellbeing that is work satisfaction (Table 3). This implies that educational leaders who have high intellectual humility are more satisfied with their jobs. These results are also consistent with the previous literature which suggests that intellectual humility enhances the organization forgiveness (Al-Abedi, 2021) which is in turn correlating with work confidence, adjustment within workplace and with duties and most importantly increases the work satisfaction. (Zacher & Schmitt, 2016).

The outcomes of the present research further showed that decision making self-esteem is significantly negatively related with buck-passing, hyper vigilance, and procrastination style among educational leaders (Table 2). This is consistent with the previous literature which shows that if a person score low on decisional self-esteem than he will make worse decisions (Phillips & Ogeil, 2017). So, decision making self-esteem has negative relationship with the maladaptive decision making styles which are hypervigilance, procrastination and buck-passing style (Burnett, 1991; Mann et al., 1998 as cited in Narangerel & Semerci, 2020).

Results showed that intellectual humility is significantly positively related with decision making self-esteem (Table 2). Intellectual humility significantly negatively related with intrusion of work into private life (Table 2). Results showed that educational leaders with low monthly income than others i.e. between 50k to 1lac show more hypervigilance style and took quick decisions to get out of the dilemma then leaders with income 1 to 2lac and above (Table 4,5). Evidence also showed that financial stress can highly impact decision-making styles. Educational leaders with lower incomes may experience higher stress levels, leading them to make quicker decisions to alleviate immediate pressures. This is in contrast to their higher-income counterparts, who can afford to engage in more thorough and less pressured decision-making processes (Bavolar, 2023).

Limitations

Only quantitative method was used in research and the data was collected using questionnaire technique. This research lacks qualitative data that gives in-depth information. Only self-report measures were used and these measures are found to be related with social desirability responding (Fisher, 1993).

Suggestions

Future researches could be done to explore the factors behind the negative relationship between occupational wellbeing and intellectual humility. Many important factors such as burnout, work-related stress etc., which have potential to affect leader's occupational wellbeing should also be

investigated in this regard.

Comparative studies should be done on leaders from different educational level institutions i.e. at school, college and university level to see the differences in their level of intellectual humility and to explore different decision making styles used by them. Future investigations could also explore the cultural differences among different decision making styles used by different educational leaders and how they are influenced by their level of intellectual humility.

Implications

The present study shed light on the decisional patterns of educational leaders of Pakistan, so these findings can be helpful to organize training programs for such leaders to bring awareness about the decision making styles used by them and to enhance their decision-making skills for their better functioning, so that it will be beneficial for educational institutions which they are leading.

Also, the present research investigated the study variables across a large age range of about 25-60 years among educational leaders, this will help in better understanding about level of intellectual humility and decision making patterns of educational leaders belonging to different age groups. Present study also highlighted that how less income can affect educational leaders decision making power in a negative way. Because this area is largely untapped, this study will act as a gateway for future research.

Conclusion

The present study has empirically investigated the impact of intellectual humility and decision making self-esteem in relation with decision making styles and occupational well-being among educational leaders. The current study concluded that the intellectual humility and decision making self-esteem are positively related with adaptive decisional making style such as vigilance and negatively related with maladaptive decision making styles such as hyper-vigilance, procrastination, and buck-passing. Present study results also showed that intellectual humility and decision making self-esteem are significantly predicting vigilance decision making style. Additional investigations will be required to understand the reasons behind slightly negative relationship of intellectual humility with occupational well-being among educational leaders.

Declaration

Funding. This research received no specific grant from any funding agency or institution.

Conflict of Interest. No conflicts of interests to disclose.

Availability of Data. Data will be available upon request.

Ethical Approval. The research was approved by ethical committee of University of Wah, Wah Cantt.

References

Ahmed, E. I., & Al-Dhuwaihi, A. (2020). Early experience of first-time principals in Saudi Arabia. *School Leadership & Management*, *40*(5), 444-464. https://doi.org/10.1080/13632434.2020.1806812

Al-Abedi, A. R. C., Khdair, W. A., & AL-HADRAWI, B. K. A. A. (2021). Intellectual humility and organizational forgiveness of university leaders: A Case of Iraq. *The Journal of Contemporary Issues in Business and Government*, *27*(3), 2770-2775. https://doi.org/10.477500/cibg.2021.27.03.332

Bavolar, J. (2023). Decision-Making Styles and Decision Outcomes. In *Brain, Decision Making and Mental Health* (pp. 465-486). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-15959-6_22

Bayhan Karapinar, P., Metin Camgoz, S., & Tayfur Ekmekci, O. (2020). Employee wellbeing, workaholism, work–family conflict and instrumental spousal support: A moderated mediation model. *Journal of Happiness Studies*, *21*, 2451-2471. https://doi.org/10.1007/s10902-019-00191-x

Coruh, Y., & Vural, M. (2019). Study on High School Teachers' Self-Esteem in Decision Making and Decision Making Styles. *Asian Journal of Education and Training*, *5*(2), 362-368. https://doi.org/10.20448/journal.522.2019.52.362.368

Daft, R. L. (2014). *The leadership experience*. Cengage Learning. https://books.google.com.pk/books?hl=en&lr=&id=KOfKAgAAQBAJ&oi=fnd&pg=PR4&dq=the+leadership+experi-

ence &ots=CI0qzAjktZ&sig=Yg9pjdXb9Kto0FyAlzhkC6JBShM&redir_esc=y#v=onepage&q=the%20leadership%20experience&f=-false

Davis, D. E., Rice, K., McElroy, S., DeBlaere, C., Choe, E., Van Tongeren, D. R., & Hook, J. N. (2016). Distinguishing intellectual humility and general humility. *The Journal of Positive Psychology*, *11*(3), 215224. https://doi.org/10.1080/17439760.

Ding, N., Xu, X., Yang, H., Li, Y., & Van Heughten, P. (2020). Decision-making Styles of Chinese business students. *Journal of Education for Business*, *95*(6), 351- 358. https://doi.org/10.1080/08832323.2019.1654968

Fiaz, N. (2021). Decision-making Styles predicting Decisional-Procrastination among College Principals. *Indian Journal of Economics and Business*, *20*(4). http://www.ashwinanokha.com/resources/v20-4%20-%2021-107-Mohsin%20Atta.pdf

Filipe, L. P., Alvarez, M. J., Roberto, M. S., & Ferreira, J. A. (2020). Validation and invariance across age and gender for the Melbourne decision-making questionnaire in a sample of portuguese adults. *Judgement and Decision Making*, *15*(1), 135-148. http://.doi.org/10.4008/4707

Hitt, M. A., Miller, C. C., & Collella, A. (2006). Organizational Behavior A Strategic Approach. John Willey and Sons. *Inc.: Hoboken, NJ*, 155-193. https://www.worldcat.org/title/organizational-behavior-a-strategic-approach/oclc/63143795

Iqbal, H. S., Akhtar, M. M. S., & Saleem, M. (2020). A study of decision making styles of academic managers in public sector universities of the Punjab. *Bulletin of Education and Research*, *42*(2), 181-196. https://eric.ed.gov/?id=EJ1280788

Isaksson, U., Hajdarević, S., Jutterström, L., & Hörnsten, Å. (2014). Validity and reliability testing of the Swedish version of Melbourne Decision Making Questionnaire. *Scandinavian Journal of Caring Sciences*, *28*(2), 405-412. https://doi.org/10.1111/scs.12052

Krumrei-Mancuso, E. J., & Rouse, S. V. (2016). The development and validation of the comprehensive intellectual humility scale. *Journal of Personality Assessment*, *98*(2), 209-221. https://doi.org/10.1080/00223891.2015.

Krumrei-Mancuso, E. J., & Rowatt, W. C. (2021). Humility in novice leaders: links to servant leadership and followers' satisfaction with leadership. *The Journal of Positive Psychology*, 1-13. https://doi.org/10.1080/17439760.2021.

Leary, M. R., Diebels, K. J., Davisson, E. K., Jongman-Sereno, K. P., Isherwood, J. C., Raimi, K. T., & Hoyle, R. H. (2017). Cognitive and interpersonal features of intellectual humility. *Personality and Social Psychology Bulletin*, *43*(6), 793-813. https://doi.org/10.1177/0146167217697695

López, H. (2012). CURRENT LEADERSHIP CHALLENGES. *The Journal of the Professor Magda Vasillov Center for Teaching and Learning*, *5*, 10. http://commons.hostos.cuny.edu/ctl/wp content/uploads/sites/26/2015/06/Touchstone-5.1.pdf#page=6

Narangerel, E. O., & Semerci, A. B. (2020). The Effects of Workload, Work Control and Self-Efficacy in Decision Making on Decision Making Styles. *Journal of Behavior Studies in Organizations*, *3*, 22-32. http://dx.doi.org/10.32038/JBSO.2020.03.04

Parker, G. B., & Hyett, M. P. (2011). Measurement of well-being in the workplace: The development of the Work Well-Being Questionnaire. *The Journal of nervous and mental disease*, *199*(6), 394-397. https://doi.org/10.1097/NMD.0b013e31821cd3b9

Phillips, J. G., & Ogeil, R. P. (2017). Cannabis, alcohol use, psychological distress, and decision-making style. *Journal of Clinical and Experimental Neuropsychology*, *39*(7), 670-681. https://doi.org/10.1080/13803395.2016.1255311

Porter, T., & Schumann, K. (2018). Intellectual humility and openness to the opposing view. *Self and Identity*, *17*(2), 139-162. https://doi.org/10.1080/15298868.2017.1361861

Salvagioni, D. A. J., Melanda, F. N., Mesas, A. E., González, A. D., Gabani, F. L., & Andrade, S. M. D. (2017). Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. *PloS one*, *12*(10), e0185781. https://doi.org/10.1371/

journal.pone.0185781

Sawatzky, N. A. (2022). *Understanding the Impact of Emotional Stress on Crisis Decision Making*. Springer Nature. https://doi.org/10.1007/978-3-030-66107-6

Shiloh, S., Koren, S., & Zakay, D. (2001). Individual differences in compensatory decision making style and need for closure as correlates of subjective decision complexity and difficulty. *Personality and Individual Differences*, *30*(4), 699710. https://doi.org/10.1016/S0191-8869(00)00073-8

Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior*, *36*(S1), S72-S103. https://doi.org/10.1002/job.1924

Urieta, P., Aluja, A., Garcia, L. F., Balada, F., & Lacomba, E. (2021). Decision-making and the alternative five factor personality model; exploring the role of personality traits, age, sex, and social positions. *Frontiers in Psychology*, 12. https://doi.org/103389/fpsyg

Zacher, H., & Schmitt, A. (2016). Work characteristics and occupational well-being: the role of age. *Frontiers in Psychology*, *7*, 1411. https://doi.org/10.3389/.2016.