

Prediction of employer–employee relationships from sociodemographic variables and social values in Brunei public and private sector workers

Lawrence Mundia
Salwa Mahalle
Rohani Matzin
Gamal Abdul Nasir Zakaria
Nor Zaiham Midawati
Abdullah
Siti Norhedayah Abdul Latif

Psychological Studies and Human Development Academic Group, Sultan Hassanal Bolkiah Institute of Education, Universiti Brunei Darussalam, Bandar Seri Begawan, Brunei Darussalam

Abstract: The purpose of the study was to identify the sociodemographic variables and social value correlates and predictors of employer–employee relationship problems in a random sample of 860 Brunei public and private sector workers of both genders. A quantitative field survey design was used and data were analyzed by correlation and logistic regression. The rationale and justification for using this approach is explained. The main sociodemographic correlates and predictors of employer–employee relationship problems in this study were educational level and the district in which the employee resided and worked. Other correlates, but not necessarily predictors, of employer–employee relationship problems were seeking help from the Bomo (traditional healer); obtaining help from online social networking; and workers with children in the family. The two best and most significant social value correlates and predictors of employer–employee relationship problems included interpersonal communications; and self-regulation and self-direction. Low scorers on the following variables were also associated with high likelihood for possessing employer–employee relationship problems: satisfaction with work achievements; and peace and security, while low scorers on work stress had lower odds of having employer–employee relationship problems. Other significant social value correlates, but not predictors of employer–employee relationship problems were self-presentation; interpersonal trust; peace and security; and general anxiety. Consistent with findings of relevant previous studies conducted elsewhere, there were the variables that correlated with and predicted employer–employee relationship problems in Brunei public and private sector workers. Having identified these, the next step, efforts and priority should be directed at addressing the presenting issues via counseling and psychotherapy with affected employees. Further research is recommended to understand better the problem and its possible solutions.

Keywords: employer–employee relationships, sociodemographic variables, social values, public and private sector workers, Brunei

Introduction

The characteristics of positive and healthy employer–employee relationships include, but are not limited to, mutual respect, acceptance, cordiality, collegiality, happiness, and satisfaction. On the other hand, the signs or symptoms of negative and unhealthy employer–employee relations are equally many and variable including different forms of arguments, disputes, quarrels, verbal and physical fights, conflicts, adversarial interactions, and bullying. Both positive and negative relationships between employers and employees affect and impact the quantity and quality of work produced. Often, negative relationships lead to, and are manifested by, absenteeism, resignations, transfer, stagnation (denial or lack of promotion), unhappiness, anxiety, stress, and

Correspondence: Lawrence Mundia
Psychological Studies and Human Development Academic Group, Sultan Hassanal Bolkiah Institute of Education, Universiti Brunei Darussalam, Jalan Tungku Link, Gadong BE 1410, Bandar Seri Begawan, Brunei Darussalam
Tel +673 893 9465
Email lawrence.mundia@ubd.edu.bn

dissatisfaction. The present study is the first investigation of employer–employee relationships in Brunei public and private sector workers and attempts to narrow the knowledge gap in this matter. Previous research revealed that there was a relationship between happiness in life and job satisfaction and that life satisfaction affected job satisfaction and vice versa.¹ Numerous other studies also found that people who were generally happy performed better at the workplace.^{2–4} Moreover, it was possible that employees who were happy may transfer their happiness from their workplace to home and also from home to their workplace.⁵

Employer–employee relationship problems

Previous research has found that employees who were not satisfied with their work relationships experienced more stress and were also less satisfied with their jobs than peers with satisfactory relationships.⁶ This finding was consistent with the results of Kang and Singh's study that showed that poor interpersonal relationships significantly contributed to stress at work.⁷ Kang and Singh further stated that poor quality of interpersonal relations at work, both with colleagues and employers, often resulted in low level of social support which, in turn, led to difficulties in coping with stress at work among the employees.⁷ Social support was important as it served as a buffer against stress.⁸ Punnett et al found that absenteeism was partly caused by the relationship between the worker and co-workers or bosses.⁹ Thirulogasundaram and Sahu stated that good supervisors, co-workers, and fairness were few factors that motivated employees to be present for work.¹⁰ Relationships within a workplace are important because they can lead to job satisfaction and lesser likelihood of absenteeism. In the study by Thirulogasundaram and Sahu, 78% of the respondents said that high job satisfaction was achievable if their supervisor was supportive emotionally and allowed the employees to voice out their inputs and participation in making decisions.¹⁰ Another 56% of the respondents in the same study said that job satisfaction could also be guaranteed if relationships among the co-workers were good and supportive.¹⁰ Poor and unsupportive workplace atmosphere has higher rate of absenteeism.¹¹ Absenteeism can also be caused by bullying and unfairness in the organization.¹²

Defining and assessing social values

There are many ways in which values can be defined or described. Values form an important part of the culture of any society. They provide the general guidelines for normative behaviors. Values such as fundamental rights, patriotism,

human dignity, rationality, sacrifice, individuality, equality, and democracy guide our behavior in many ways. Based on our literature sources, values are both “desirable” and “desired” behaviors expected of people in a given group, community, or society.¹³ In this definition, the terms “desirable” and “desired” refer to what one “ought” to do and what one “wants” to do, respectively.¹³ The use of words “desirable” and “desired” makes it difficult to define values precisely. For instance, behaviors that are considered to be desirable or desired in one culture and circumstance may not be viewed the same way in another culture or situation. In addition, values are multi-dimensional and multi-faceted constructs that overlap in some cases (e.g., moral values are somewhat similar to ethical values). Furthermore, values may be classified in a variety of ways. For example, we have the so-called personal values (e.g., an individualistic preference for high academic achievement), national values (e.g., American values), regional values (e.g., western values), and collectivist values (e.g., communal ways of living). Attempts have also been made by researchers to identify the most common values referred to as world-wide universal values or cross-cultural values.¹⁴ In the present study, we simply refer to values as “social values” because they are embedded in several social domains such as cultural, family, religious, moral, ethical, political, educational, occupational, and sociological disciplines.¹³ At the time of conducting the present study, there was a dearth and scarcity of recent research on social values. Inglehart's old research is the only one that extensively addressed the issues of social values.^{15,16} Inglehart focused on 2 types of social values, namely: materialist values, which were a response to the need for economic and physical security (e.g., fighting rising prices); and nonmaterialist values, which were concerned with social and self-actualizing needs (e.g., decentralizing government decision-making processes). On social values related to employees, Hofstede discussed 4 types of work values: power distance (e.g., social inequality and unequal power balance); uncertainty avoidance (e.g., ways of dealing with the unknown future); individualism (autonomy) versus collectivism (group interdependence); and masculinity (e.g., male assertiveness) versus femininity (e.g., female nurturance).¹⁷ Hofstede argued that these 4 basic work values, which he operationalized at the ecological level, could be modified for use in non-work contexts. Much of the social psychology and sociological research on social and work values have tended to focus on measuring the concerns that people have for the self and others, known as social value orientation (SVO).^{18,19} Under the SVO theory, people are

divided into 4 social value-based categories. People who emphasize benefiting at the expense of others are referred to as individualistic or egoistic. Those who seek to exploit gains from individual differences are said to be competitive (competitors or proselves). Individuals who advocate equality or collective interest (also known as joint/equal outcomes) are known as cooperatives (cooperators or prosocials). Persons with narrow self-interest but much compassion for others are labeled as altruistic. Like the interpersonal trust concept, there are also many questionnaires that measure both social and work values.²⁰ The present study only used some items from the Value Survey and the Goal and Mode Values Inventories.^{21,22} Rokeach divided the values into 2 categories: terminal values (which referred to goals in life); and instrumental values (by which he meant modes of conduct).²¹ The Goal and Mode Values Inventories were an attempt to improve on Rokeach's Value Survey instrument.²² Braithwaite and Law separated social goals/values from personal goals/values and produced a 3-part instrument with 13 dimensions: traditional religiosity; personal growth and inner harmony; physical well-being; secure and satisfying interpersonal relationships; social standing; social stimulation; positive orientation to others; propriety in dress and manners; religious commitment; assertiveness; getting ahead; international harmony; and national strength and order. Other than these instruments, our study also adapted and incorporated some items from the World Values Survey, which taps a wider diversity of values, including the universal, national, political, security, and moral ones.²³

Objectives of the study

The purpose of the present pioneer study was to identify sociodemographic variables and social values that predict employer–employee relationship problems in Brunei public and private sector employees. A study similar to the current research has not been done before in Brunei and we hope this inquiry will contribute to literature on this matter.

Method

The design, participants, instruments, data analysis techniques, and procedures used in this study are briefly explained under appropriate subheadings below.

Design

We used a quantitative field survey design. The rationale and justification for utilizing this approach was to collect the required data from a large sample within a short time. Other types of survey research (e.g., postal, online, telephone, and longitudinal) could not achieve this goal.

Participants

According to the Department of Economic Planning and Development, there were 189,500 employed persons in Brunei in 2014 comprising 108,500 males (57.3%) and 81,000 females (42.7%). Of these, 137,300 (72.5%) were local Brunei citizens, for whom the current study was designed, while 52,200 (27.5%) were foreigners.²⁴ Although the numbers were not shown in this report, the public sector employed far more people than the private sector. A list of government ministries and departments located throughout Brunei was obtained from the Prime Minister's Office as a sampling frame for public employee participants. A separate list of companies operating in Brunei-Muara district (the metropolitan area with the largest population in the country) was made by the researchers and used as a sampling frame for private sector employee participants. Once the relevant total population is known, determining the appropriate sample size for a study requires the use of either a formula as the one employed by Yamane and others or a table of population values and corresponding sample sizes such as the one developed by Krejcie and Morgan.^{25–27} No formula was used in the current study. However, since the population of interest to whom the results of the present study could be generalized was 137,300, a random sample of ≥ 384 was going to be considered sufficient for our research according to the population and sample size table of Krejcie and Morgan.²⁷ Using the simple random sampling technique, 822 participants (instead of 384) were recruited for the study from different ministries and departments in the public sector throughout Brunei. Unfortunately, only 38 persons were recruited from the private sector due to potential participants' lack of interest to volunteer for the study. The 2 selections gave us a composite sample of 860 labor force from both sectors of the Brunei economy (public and private). Based on our 4-point inclusion criteria, we selected only those people who met the following conditions: 1) persons of all genders, ethnicities, and religions were acceptable; 2) full Brunei citizen or permanent resident; 3) employed in the public or private sector; and 4) willingly volunteer to participate in the study. No other inclusion and exclusion criteria were applied beside these. The demographic composition and personal characteristics of the participants are presented in Table 1. Permission to conduct the study was obtained from the University of Brunei Darussalam (UBD) Ethics Committee and the Brunei Research Council (BRC) Ethics Committee. In addition, each respondent gave both a verbal consent and written agreement for participating in the study.

Table 1 Participants' demographic information (N=860)

Variable	Gender	Number (%)	Mean (SD)
Age	All	860 (100%)	37.690 (9.045)
	Females	613 (71.300%)	37.690 (9.262)
	Males	247(28.700%)	37.710 (8.516)
Race	Group	Frequency	Percentage
	Malay	810	94.200
	Chinese	25	2.900
	Others	22	2.600
	Missing	1	0.300
Religion	Muslim	837	97.300
	Non-muslim	12	1.400
	No religion	10	1.200
	Missing	1	0.300
Citizenship	Brunei citizen	831	96.600
	Permanent resident	26	3.000
	Missing	3	0.400
Education	Low (primary to year 13)	362	42.100
	Middle (post-secondary to diploma)	194	22.600
	High (bachelor's degree to doctoral degree)	301	35.000
	Missing	3	0.300
Employer	Public sector (government)	822	95.600
	Private sector (non-government)	38	4.400
Marital status	Single (never married)	221	25.700
	Married	615	71.500
	Divorced (17)/widowed (7)	24	2.800
Do you have children?	Yes	571	66.400
	No	286	33.300
	Missing	3	0.300
District	Brunei-Muara	721	83.800
	Tutong	104	12.100
	Kuala Belait	20	2.300
	Temburong	10	1.200
	Missing	5	0.600
Who do you live with?	Alone	27	3.100
	Parents	296	34.400
	In-laws	57	6.600
	Family members (siblings)	73	8.500
	Spouse and children	384	44.700
	Missing	23	2.700
Do you stay/live in your own house?	Yes	502	58.400
	No	356	41.400
	Missing	2	0.200
Are you the chief wage earner in your household?	Yes	282	32.800
	No	561	65.200
	Missing	17	2.000

Instruments

A 16-item demographic questionnaire (Part A) that collected the participants' personal data is reported in Table 1. The researchers constructed all the 16 items in Part A (demographic questionnaire) using sources from the literature review and their own conceptualization of the problem investigated. Besides this, we also used 13 scales (in Parts B–F of the instrument) that measured a wide range of social values shown in Table 2.

Part B consisted of 101 items pertaining to desirable behavioral values in Brunei that made up 4 subscales shown in Table 2. The items in Part B of the instruments were rated on 5-point Likert-type scales (1. Not at all important; 2. Somewhat important; 3. Moderately important; 4. Quite important; and 5. Extremely important). An example of one sample instruction and item to illustrate this section is as follows: rate the following statement according to how you regard it as desirable in your life (To have true friends: 1–5).

Table 2 Scale statistics, alpha reliability, and construct validity (N=860)

EFA ¹ factor/Scale name	Items	Mean	SEM ²	SD ³	Median	Average CITSr ⁴	Cronbach alpha	% Variance accounted	KMO ⁵	BTS ⁶ X ²	df	Sig.
Desired behavioral values (Part B)												
Factor 1 – Peace and security	36	157.460	0.791	23.191	163.000	0.759	0.972	24.082	0.979	57,237.272	5050	0.000
Factor 2 – Social welfare/cultural duties	26	114.150	0.524	15.362	117.000	0.783	0.958	17.642				
Factor 3 – Personal well-being and happiness	17	59.350	0.390	11.445	60.000	0.744	0.903	12.006				
Factor 4 – Moral obligations	11	41.960	0.255	7.478	43.000	0.682	0.861	9.779				
Total variance	–	–	–	–	–	–	–	63.509				
Preferred basic values (Part C)												
Factor 1 – Self-regulation and self-direction	17	70.180	0.358	10.485	72.000	0.638	0.948	31.492	0.958	14,744.970	435	0.000
Factor 2 – Self-presentation	7	24.240	0.155	4.555	25.000	0.609	0.853	19.715				
Factor 3 – Satisfaction with work-related achievements	4	11.580	0.106	3.118	12.000	0.565	0.779	11.451				
Total variance	–	–	–	–	–	–	–	62.658				
Level of interpersonal trust (Part D)												
Factor 1 – Level of interpersonal trust	10	31.700	0.237	6.956	32.000	0.703	0.911	67.234	0.859	3829.011	45	0.000
General worries/anxiety (Part E)												
Factor 1 – Level of general anxiety	7	38.647	0.138	6.217	33.000	0.636	0.873	66.201	0.918	3670.046	21	0.000
Employees' workplace problems (Part F)												
Factor 1 – Interpersonal communication problems	11	38.440	0.297	8.716	40.000	0.649	0.880	22.860	0.940	15,683.138	378	0.000
Factor 2 – Employer–employee relationship problems	8	17.820	0.164	4.811	18.000	0.667	0.920	17.249				
Factor 3 – Work stress problems	5	12.730	0.139	4.062	13.000	0.585	0.865	13.107				
Factor 4 – Work attendance problems	4	13.310	0.132	3.882	14.000	0.611	0.825	10.892				
Total variance	–	–	–	–	–	–	–	64.107				

Notes: EFA, Exploratory factor analysis; ²SEM, standard error of the mean; ³SD, standard deviation; ⁴CITSr, Average Corrected Item-to-Scale correlation; ⁵KMO, Kaiser–Meyer–Olkin measure of sampling adequacy; ⁶BTS, Bartlett's test of sphericity.

The researchers constructed 73 of the 101 items in Part B (desired behavioral values). The other 28 items in Part B were adapted from the Value Survey²¹ and the World Values Survey.²³

Part C comprised 30 items related to preferred basic values in Brunei that were divided into 3 subscales presented in Table 2. The items in Part C questionnaires were also rated on 5-point Likert scales (1. Completely unimportant; 2. Not very important; 3. More or less important; 4. Important; and 5. Very important). An example of one instruction and item from this section is as follows: rate this statement according to the way you believe you ought to behave (To obtain social support or help when you have a problem – 1–5). Eighteen of the 30 items in Part C (preferred basic values) were modified from the Goal and Mode Values Inventories.²² The researchers contributed the remaining 22 items in this section.

Part D had one 10-item questionnaire that measured the level of interpersonal trust. The items in this instrument were rated on 5-point semantic differential scales (e.g., rate your trust on the people you work with or to what extent do you trust your co-workers [supervisor or boss]? Response: Do not trust at all 1–5 Trust completely). Most of the 10 items in Part D (level of interpersonal trust) were adapted from the Interpersonal Trust Scale.²⁸

Part E had one 7-item questionnaire that measured work-related general anxiety or worries. The items in this instrument were also rated on 5-point semantic differential scales (e.g., to what degree are you worried about losing your job? – Response: Not at all 1–5 Very much). The researchers provided all the 7 items in Part E (general anxiety/worries).

Part F contained 28 items that formed 4 questionnaires measuring employees' workplace problems. All the items in this section were rated on 5-point Likert scales (e.g., Please rate the frequency of the following problems you face or are facing at work: Conflicts and not getting along with co-workers [supervisor or boss] – 1. Never; 2. Rare; 3. Sometimes; 4. Often; and 5. Always). The items in these scales were derived from 5 main sources: 1) items adapted from the Interpersonal Trust Scale,²⁸ the Value Survey,²¹ and the Goal and Mode Values Inventories;²² 2) modified items from the World Values Survey,²³ which is available online; and 3) the researchers' own constructed items (28 in total) based on their content review of the relevant literature as well as their conceptualization of social values in the Brunei context.

Two main adaptations (changes or modifications) were made in all the borrowed items: 1) wording or phrasing of the item statements/stems; and 2) the response and scoring formats of the items. First, all items were worded positively and did not need reverse scoring. Second, we used only the

Likert and semantic differential response formats. Third, each respondent's total scale score was simply the sum of all the item nominal values endorsed. In the literature, for example, the Value Survey²¹ requires the respondents to rank the values, whereas in our instruments, the participants were requested to rate the values either on Likert or semantic differential scales as these were easier to do for our participants than ranking concepts, some of which were very abstract. In their comparative study on assessing values, Alwin and Krosnick²⁹ concluded that:

Although ranking methods tend to be preferred for measuring social values, the empirical evidence available from past research suggests that rating techniques may be used just as effectively.²⁹

According to Alwin and Krosnick, ranks have 4 main disadvantages. First, they are difficult and taxing to do when too many concepts are to be ranked.²⁹ Second, they are time-consuming and expensive to administer. Third, they require the use of visual aids or show cards. Fourth, the sum of ranks per respondent is affected by linear dependency. Ratings also have 2 main disadvantages discussed by Alwin and Krosnick.²⁹ First, though easier to administer and score, the responses may be less precise. Second, they are prone to problems of response style or response set. The items in the scales for Rotter, Rokeach, and Braithwaite and Law are freely available in a book by Robinson and co-authors²⁰ while those from the World Values Survey²³ were available online for free open-access download. Researchers are allowed to use items from all these instruments in their investigations, provided full acknowledgement is made. In addition, researchers are also free to make adaptations, modifications, or changes in the items (to suit their contexts) without written permission from the copyright owners. This sourcing procedure generated and provided a pool of 176 initial items on various values that were subjected to exploratory factor analyses to determine their underlying constructs. Prior to performing the factor analyses, the 176 pooled items were categorized into 5 broad conceptual domains or themes (Parts B–F) as explained previously, based on their content descriptions, namely: desired behavioral values (101 items); preferred basic values (30 items); level of interpersonal trust (10 items); general worries/anxiety (7 items); and employees' workplace problems (28 items).

A total of 13 major factors, each with at least 4 or more items that loaded high (≥ 0.400), emerged from the factor analyses. The distribution of the factors across the domains was desired behavioral values (4 factors/subscales, 90 retained items); preferred basic values (3 subscales, 28

retained items); level of interpersonal trust (1 scale, 10 items); general worries/anxiety (1 scale, 7 items); and employees' workplace problems (4 subscales, 28 items). The naming of factors or scales was largely based on content analyses of the item descriptions in the Brunei linguistic and cultural context. Because of extensive changes made to the borrowed items from published scales and inclusion of a large number of items composed by the researchers as well as those taken from the online World Values Survey, the 13 generated factors were quite different from the ones originally obtained by Rotter, Rokeach, and Braithwaite and Law. The domains, factors with their scale names, number of items in each scale, and scale descriptive statistics are presented in Table 2 together with information on scale reliability and validity. Items in each scale were reasonably homogeneous or unidimensional, as indicated by the high adjusted or nonspurious item-total correlations. In addition, each scale or subscale had good internal consistency reliability as shown by the high Cronbach alpha coefficients. Furthermore, the domains and their scales or subscales had adequate construct validity revealed in Table 2 by the percentage of variance accounted. Moreover, the Kaiser–Meyer–Olkin measures of sampling adequacy and Bartlett's tests of sphericity showed that the factor analyses we performed were satisfactory and suited the data.

In addition to construct validity, we also examined the convergence and discriminant validity of the instruments presented in Table 2 by correlating the derived measures. The resulting interscale correlations are displayed in Table 3. In this table, any 2 paired instruments with an inter-correlation of ≥ 0.710 had more than 50% common variance (an indication of possessing moderate to high convergent validity).

Conversely, paired scales with an inter-correlation below the criterion value of 0.710 had satisfactory discriminant validity.

The meaning of low scores on each scale in the present study is briefly explained below in terms of a comparison between low scorers ($<$ Median value, coded 1) versus high scorers (\geq Median value, coded 0).

- Peace and security – low scores mean that there is not much peace and security in the subject's mind and environment.
- Social welfare/cultural duties – low scores mean that subject tends to behave in socially and culturally unacceptable ways.
- Personal well-being and happiness problems – low scores mean that subject's life is going on well as desired or planned.
- Moral obligations – low scores mean that subject sometimes does not know what things are right and wrong and behave accordingly.
- Self-regulation and self-direction problems – low scores mean that subject has no problems of controlling and managing his/her life.
- Self-presentation problems – low scores mean that subject may have low self-confidence and low self-esteem and tends to present himself/herself in a negative manner or direction.
- Satisfaction with work-related achievements – low scores mean that subject is dissatisfied with his/her work achievements.
- Interpersonal trust problems – low scores mean that subject distrusts others.

Table 3 Interscale correlations as evidence of convergent and divergent validity (N=860)

Scale ^a	1	2	3	4	5	6	7	8	9	10	11	12
1	1											
2	0.792**	1										
3	0.650**	0.636**	1									
4	0.754**	0.735**	0.735**	1								
5	0.726**	0.636**	0.521**	0.584**	1							
6	0.595**	0.521**	0.582**	0.537**	0.789**	1						
7	0.323**	0.265**	0.404**	0.350**	0.369**	0.402**	1					
8	0.344**	0.297**	0.317**	0.378**	0.402**	0.407**	0.259**	1				
9	0.455**	0.493**	0.349**	0.336**	0.473**	0.402**	0.116**	0.141**	1			
10	0.314**	0.276**	0.189**	0.211**	0.416**	0.393**	0.104**	0.277**	0.271**	1		
11	0.265**	0.235**	0.177**	0.167**	0.375**	0.355**	0.104**	0.291**	0.261**	0.771**	1	
12	0.180**	0.178**	0.118**	0.105**	0.267**	0.278**	0.177**	0.226**	0.135**	0.576**	0.642**	1
13	0.210**	0.181**	0.179**	0.179**	0.277**	0.278**	0.130**	0.250**	0.194**	0.605**	0.488**	0.424**

Notes: ** $p < 0.01$ (2-tailed). ^aScale – 1: Peace and security; 2: Social welfare/cultural duties; 3: Personal well-being and happiness; 4: Moral obligations; 5: Self-regulation and self-direction; 6: Self-presentation; 7: Satisfaction with work-related achievements; 8: Level of interpersonal trust; 9: Level of general anxiety; 10: Interpersonal communication problems; 11: Employer–employee relationships; 12: Work stress problems; 13: Work attendance problems.

- General work anxiety problems – low scores mean that subject has fewer worries at work.
- Interpersonal communication problems – low scores mean that subject has fewer communication problems.
- Employer–employee relationship problems – low scores mean that subject often does not get along well with employers, bosses, or supervisors.
- Work stress problems – low scores mean that subject has fewer stressful problems at work.
- Work attendance problems – low scores mean that subject does not have many problems that affects his/her work attendance.

Data analysis

All our variables (both independent and dependent) were categorical. The quantitative data were analyzed using descriptive statistics (frequencies, percentages, mean, and standard deviation) and inferential statistics (Pearson and Spearman correlations and hierarchical binary logistic regression analysis). To determine the importance of our findings, we used 2-tailed tests of statistical significance at both $p=0.05$ and $p=0.01$ levels and tests of statistical power such as effect sizes and model fit chi-square indices for binary logistic regression analysis). All the statistical analyses were performed on Statistical Package for Social Sciences (SPSS) Version 22.

Procedures

The present study was funded by the BRC in the Government of Brunei Darussalam through the UBD, a state tertiary institution. Written permission and approval to conduct the study were obtained from the UBD Ethics Committee as well as the BRC Ethics Committee on behalf of the Government of Brunei Darussalam. In addition, ethical conditions and rights (e.g., anonymity, confidentiality, privacy, voluntary participation, protection from harm, and informed consent) for participating in the study were first explained verbally in either English or Bahasa Melayu language to individual research participants prior to collecting the data. After this, verbal and written informed consent was secured from each research participant in either of the 2 languages at the time and place of collecting the data. Only persons who voluntarily agreed to participate in the study were recruited. Coercion and deception were not used when recruiting the participants. Furthermore, all the study's research tools were written in simple English language requiring only Grade 7 or Year 7 level of education. To address and reduce any possible linguistic and cultural biases, parallel bilingual items were

presented on the instruments in both English and Bahasa Melayu, the main and official language of Brunei spoken by the majority of the people. Above all, data collection occurred in the participants' work environments to increase the study's ecological validity.

Results

The main findings of the present study are presented and explained below according to the objectives of the investigation. Most of the findings are not compared with previous trends in Brunei due to lack of similar past research and data based on the same variables as investigated in the current study.

Relationships between sociodemographic variables and employer–employee relationship problems

To determine the relationships between sociodemographic variables and employer–employee relationship problems, we used Spearman correlation method and the binary logistic regression analysis with backward elimination. Spearman correlation was suitable to use since our sociodemographic variables (independent variables, IVs) and the employer–employee variable (dependent variable, DV) were categorical rather than continuous. As reported in Table 4, four sociodemographic variables had low but significant correlations with employer–employee relationship problems (both negative and positive): educational level ($r[860]=-0.135, p<0.01$); seeking help from Bomo or traditional healer ($r[860]=0.086, p<0.05$);

Table 4 Relationship between sociodemographic variables and employer–employee relationship problems (N=860)

Demographic variable	Employer–employee relationship problems
Gender	0.017
Employer	0.050
Educational level	-0.135**
Sought help from counselor/psychologist	0.052
Sought help from family members	-0.050
Sought help from prayers/religion	-0.011
Sought help from Bomo (traditional healer)	0.086*
Sought help from friends	0.080
Sought help from online social networking	0.094**
Sought help from a religious person/teacher (e.g., imam)	0.005
Marital status	0.061
Who do you live with?	0.055
District	-0.080*
Chief wage earner in the household	-0.044

Notes: * $p<0.05$ (two-tailed). ** $p<0.01$ (two-tailed).

seeking help from online social networking ($r[860]=0.094$, $p<0.01$); and the district in which the employee resided ($r[860]=-0.080$, $p<0.05$).

The bivariate logistic regression enabled us to explore, identify, and select sociodemographic variables that were most relevant to predicting employer–employee relationship problems. This type of regression analysis required a dichotomous DV while the IVs could be either dichotomous or multi-categorical, or a combination of these as done in previous research.^{30–32} In the present study, our DV (employer–employee relationship problems) was dichotomized at the median score to obtain two groups of high and low scorers

(Table 2 for median values). Low scorers were coded one (1) while high scorers were coded zero (0). Previous research using Brunei samples showed that high and low scorers on psychological questionnaires often behaved differently.^{30–32} Findings of the binary logistic regression analysis are presented in Table 5. In Step 1 (Model 1), we entered all the IVs and regressed them on the DV in 12 iterative steps using SPSS (Version 22). For the sake of brevity, Table 5 shows only the specific contribution of each categorical sociodemographic IV to the DV (employer–employee relationship problems) in the first and last steps. As in previous similar studies, Step 1 (first model) was overfitted and less efficient because

Table 5 Relationship between sociodemographic variables and employer–employee relationship problems (N=860)

Model ¹ /variables	B	SE	Wald X ²	df	Sig.	OR	95% CI for OR	
							Lower	Upper
Step 1								
Males (coded 1, n=235)	0.057	0.195	0.086	1	0.769	1.059	0.723	1.550
Educational level			14.170	2	0.001**			
Low education ¹ (coded 1, n=333)	0.562	0.172	10.712	1	0.001**	1.754	1.253	2.455
Middle education ² (coded 2, n=183)	0.596	0.196	9.261	1	0.002**	1.815	1.236	2.664
Employer (private, coded 1, n=35)	-0.306	0.360	0.723	1	0.395	0.737	0.364	1.491
Help from counselor (yes, coded 1, n=64)	-0.057	0.280	0.041	1	0.840	0.945	0.545	1.637
Help from family (yes, coded 1, n=709)	0.122	0.222	0.302	1	0.583	1.130	0.731	1.745
Help from prayers (yes, coded 1, n=622)	0.044	0.177	0.062	1	0.803	1.045	0.738	1.480
Help from Bomo ³ (yes, coded 1, n=8)	-1.236	0.846	2.135	1	0.144	0.290	0.055	1.525
Help from friends (yes, coded 1, n=436)	-0.179	0.160	1.255	1	0.263	0.836	0.612	1.143
Help from online social network (yes, coded 1, n=46)	-0.436	0.332	1.725	1	0.189	0.647	0.338	1.239
Help from a religious person (yes, coded 1, n=159)	0.064	0.198	0.104	1	0.747	1.066	0.723	1.571
Marital status			1.580	2	0.454			
Single (coded 1, n=203)	0.581	0.467	1.548	1	0.213	1.788	0.716	4.467
Married (coded 2, n=588)	0.362	0.416	0.756	1	0.385	1.436	0.635	3.244
Do you have children (yes, coded 1, n=550)	0.388	0.260	2.227	1	0.136	1.474	0.885	2.455
Who do you live with			5.215	4	0.266			
Alone (coded 1, n=26)	-0.587	0.440	1.782	1	0.182	0.556	0.235	1.316
Parents (coded 2, n=286)	-0.069	0.201	0.117	1	0.732	0.933	0.629	1.385
In-laws (coded 3, n=57)	-0.361	0.298	1.473	1	0.225	0.697	0.389	1.249
Family members (coded 4, n=66)	-0.480	0.290	2.753	1	0.097	0.619	0.351	1.091
District			8.520	3	0.036*			
Brunei-Muara (coded 1, n=682)	-0.656	0.490	1.794	1	0.180	0.519	0.199	1.355
Tutong (coded 2, n=103)	-1.180	0.511	5.337	1	0.021*	0.307	0.113	0.836
Kuala Belait (coded 3, n=19)	-0.803	0.688	1.359	1	0.244	0.448	0.116	1.727
Are you chief wage-earner (yes, coded 1, n=274)	0.183	0.185	0.979	1	0.323	1.201	0.835	1.728
Step 12								
Educational level			15.210	2	0.000**			
Low education ¹ (coded 1, n=333)	0.597	0.164	13.272	1	0.000**	1.817	1.318	2.506
Middle education ² (coded 2, n=183)	0.540	0.192	7.918	1	0.005**	1.717	1.178	2.501
Help from a religious person (yes, coded 1, n=8)	-1.399	0.830	2.840	1	0.092	0.247	0.049	1.256
Do you have children (yes, coded 1, n=550)	0.320	0.153	4.396	1	0.036*	1.377	1.021	1.857
District			9.559	3	0.023*			
Brunei-Muara (coded 1, n=682)	-0.224	0.156	2.060	1	0.151	0.799	0.589	1.085
Tutong (coded 2, n=103)	-0.737	0.240	9.430	1	0.002**	0.479	0.299	0.766
Kuala Belait (coded 3, n=19)	0.370	0.483	0.586	1	0.444	0.691	0.268	1.781

Notes: ¹Low education = Primary school to General Certificate of Education Advanced Level (GCE A-Level). ²Middle education = Post-secondary to Higher National Diploma (HND). ³Bomo = traditional healer. * $p<0.05$ (two-tailed). ** $p<0.01$ (two-tailed). ¹Step 1: R Squares = 0.069 (Cox and Snell), 0.091 (Nagelkerke); Hosmer and Lemeshow X² (df=8)=14.345, $p=0.073$. ²Step 12: R Squares = 0.054 (Cox & Snell), 0.072 (Nagelkerke); Hosmer and Lemeshow X² (df=6)=3.783, $p=0.706$.

it contained both the needed and unwanted IVs.^{30–32} The unnecessary IVs had relatively higher standard errors.^{30–32} Following the procedures employed in past research, SPSS hierarchically removed the irrelevant terms stepwise in the subsequent models.^{30–32} Though underspecified as in previous studies, Step 12 (last model) contained the best and statistically significant predictors for employer–employee relationship problems that had lower standard errors after adjusting for non-desirable variables.^{30–32} The suitable IVs were low education (n=333), middle education (n=183); having children in the family (n=550), and residing in Tutong district (n=103). This binary logistic model accounted for about 7%–9% of the common variance between the IVs and DV in the first step and ~5%–7% in the last step. The model was acceptable as illustrated by the nonsignificant X^2 fit indices at the bottom of Table 5, similar to results in previous studies.^{30–32} Compared with workers with high education (n=297), employees with low educational background (n=333) were 1.8 times more likely to have employer–employee relationship problems (B=0.597, $p<0.01$; OR=1.817, 95% CI=1.318–2.506, Table 5). Similarly, employees with a middle education (n=183) had also high odds ratios for having employer–employee relationship problems compared with peers with high education, n=297 (B=0.540, $p<0.01$; OR=1.717, 95% CI=1.178–2.501). In addition, workers with children in the family (n=550) were found to have a high likelihood of possessing employer–employee relationship problems compared with their counterparts without children, n=263 (B=0.320, $p<0.05$; OR=1.377, 95% CI=1.021–1.857). However, evidence in Table 5 revealed that employees in Tutong district (n=103) were far less likely to have employer–employee relationship problems compared with colleagues in Temburong district, n=9 (B=-0.737, $p<0.01$; OR=0.479, 95% CI=0.299–0.766). Further research with interview probes was required to understand this finding.

Relationship between social values and employer–employee relationship problems

To assess the association between social values and employer–employee relationship problems, we used Pearson correlation and the binary logistic regression analysis procedure with backward elimination. Pearson correlation was relevant here because all the variables we inter-correlated had continuous rather than categorical scores. As reported earlier in Table 3, the best and highest significant social value correlates of employer–employee relationship problems were interpersonal communications ($r[860]=0.771$, $p<0.01$); self-regulation

and self-direction ($r[860]=0.375$, $p<0.01$); self-presentation ($r[860]=0.355$, $p<0.01$); interpersonal trust ($r[860]=0.291$, $p<0.01$); peace and security ($r[860]=0.265$, $p<0.01$); and general anxiety ($r[860]=0.261$, $p<0.01$).

For the binary logistic regression analysis, all our variables IVs (social values) and the DV (employer–employee relationship problems) were bivariate having been dichotomized at the median score (Table 2). The analysis was completed in 8 iterations but only the first and last steps are shown in Table 6. After adjusting for unnecessary terms, the model accounted for almost 16%–21% variance in the first step and 15%–20% in the last step (both with acceptable fit indices, refer bottom of Table 6). Low scorers on satisfaction with work achievements (n=410) were 2.4 times more likely to have employer–employee relationship problems compared with high scorers, n=450 (B=0.853, $p<0.01$; OR=2.348, 95% CI=1.781–3.094). In the same way, low scorers on self-regulation and self-direction (n=396) also had high odds ratios for possessing employer–employee relationship problems compared with high scorers, n=464 (B=0.419, $p<0.01$; OR=1.520, 95% CI=1.096–2.107). Low scorers on peace and security (n=426) showed a near significant trend for having employer–employee relationship problems compared with high scorers, n=434 (B=0.312, $p<0.10$; OR=1.366, 95% CI=0.993–1.880). On the contrary, low scorers on interpersonal communication (n=404) were far less likely to have employer–employee relationship problems compared with high scorers, n=456 (B=-1.067, $p<0.01$; OR=0.344, 95% CI=0.253–0.468). Similarly, low scorers on work stress (n=403) were equally far less likely to have employer–employee relationship problems compared with high scorers, n=457 (B=-0.663, $p<0.01$; OR=0.515, 95% CI=0.384–0.691).

Discussion

We obtained many findings most of which require further interpretation and clarification in this section. They are briefly discussed below under separate subheadings according to the objectives of the study.

Relationship between sociodemographic variables and employer–employee relationship problems

The 2 main sociodemographic correlates and predictors of employer–employee relationship problems in this study were educational level and district in which the employee resided and worked. Employees with both low and middle educational backgrounds were highly likely to have employer–employee

Table 6 Relationship between social values and employer–employee relationship problems (N=860)

Model ^a /variables	B ^b	SE	Wald X ²	df	Sig.	OR	95% CI for OR	
							Lower	Upper
Step 1								
Peace and security (low scorers, coded 1, n=426)	0.193	0.193	1.002	1	0.317	1.213	0.831	1.770
Social welfare and cultural (low scorers, coded 1, n=424)	0.165	0.182	0.825	1	0.364	1.180	0.826	1.686
Personal well-being and happiness (low scorers, coded 1, n=422)	0.120	0.182	0.439	1	0.508	1.128	0.790	1.610
Moral obligations (low scorers, coded 1, n=395)	0.108	0.182	0.352	1	0.553	1.114	0.780	1.591
Self-regulation and self-direction (low scorers, coded 1, n=396)	0.420	0.188	5.008	1	0.025**	1.521	1.054	2.197
Self-presentation (low scorers, coded 1, n=425)	-0.192	0.188	1.037	1	0.308	0.826	0.571	1.194
Satisfaction with work achievements (low scorers, coded 1, n=410)	0.810	0.150	29.336	1	0.000***	2.248	1.677	3.014
Interpersonal trust (low scorers, coded 1, n=391)	0.082	0.152	0.289	1	0.591	1.085	0.806	1.461
General work anxiety (low scorers, coded 1, n=402)	-0.096	0.158	0.367	1	0.544	0.909	0.667	1.238
Interpersonal communication (low scorers, coded 1, n=404)	-1.120	0.169	43.775	1	0.000***	0.326	0.234	0.455
Work stress (low scorers, coded 1, n=403)	-0.718	0.156	21.177	1	0.000***	0.488	0.359	0.662
Work attendance (low scorers, coded 1, n=425)	0.125	0.158	0.627	1	0.428	1.133	0.832	1.544
Step 8								
Peace and security (low scorers, coded 1, n=426)	0.312	0.163	3.665	1	0.056*	1.366	0.993	1.880
Self-regulation and self-direction (low scorers, coded 1, n=396)	0.419	0.167	6.301	1	0.012**	1.520	1.096	2.107
Satisfaction with work achievements (low scorers, coded 1, n=410)	0.853	0.141	36.729	1	0.000***	2.348	1.781	3.094
Interpersonal communication (low scorers, coded 1, n=404)	-1.067	0.157	45.968	1	0.000***	0.344	0.253	0.468
Work stress (low scorers, coded 1, n=403)	-0.663	0.150	19.660	1	0.000***	0.515	0.384	0.691

Notes: * $p < 0.10$ (two-tailed). ** $p < 0.05$ (two-tailed). *** $p < 0.01$ (two-tailed). ^aStep 1: R Squares = 0.156 (Cox and Snell), 0.207 (Nagelkerke); Hosmer and Lemeshow X² (df = 8)=37.324, $p=0.016$. ^bStep 8: R Squares = 0.151 (Cox and Snell), 0.201 (Nagelkerke); Hosmer and Lemeshow X² (df = 8)=74.542, $p=0.142$. ^cB: the B and other coefficients in this table refer to the low scorers on all the variables (coded 1) who were compared to the high scorers (reference group coded 0).

relationship problems. However, employees in Tutong district were not likely to have major employer–employee relationship problems. Three sociodemographic variables (seeking help from the Bomo or traditional healer, obtaining help from online social networking, and workers with children in the family) adequately related with but failed to predict employer–employee relationship problems. The most highly educated workers usually get the most highly paid jobs and tend to be the bosses. In view of this, highly educated employees were not expected to have relational problems with employers and were happy and satisfied with their jobs compared with employees with low and middle level education. Previous research has found a relationship between happiness in life and job satisfaction and that life satisfaction affected job satisfaction.¹ Other previous studies also show that people who were generally happy performed better at the workplace.^{2–4} It was possible that employees who were happy may transfer their happiness from their workplace to home and vice versa.⁵

Relationship between social values and employer–employee relationship problems

The 3 best and most significant social value correlates and predictors of employer–employee relationship problems were interpersonal communications (on which low scorers were less likely to have employer–employee relationship

problems); self-regulation and self-direction (where low scorers had high odds ratios for employer–employee relationship problems); and peace and security (for which low scores were associated with a high likelihood of having employer–employee relationship problems). Three social values (self-presentation, interpersonal trust, and general anxiety) correlated with employer–employee relationship problems but were not predictors of this variable. With regard to general work anxiety and interpersonal trust, previous research consistently found that employees who were not satisfied with their work relationships experienced more stress and were also less satisfied with their jobs than peers with satisfactory relationships.^{6,7} Social support was important as it served as a buffer against stress.⁸ In their study, Punnett et al found that absenteeism was largely determined by the relationship between a worker and co-workers or bosses.⁹ Bullying and unfairness in an organization was another major cause of absenteeism.¹² Thirulogasundaram and Sahu stated that good supervisors, co-workers, and fairness were some of the factors that encouraged employees to go for work.¹⁰ On the other hand, poor and unsupportive workplace atmospheres tended to have higher rates of absenteeism.¹¹

Conclusion

Evidence from the present study indicated a relationship between some sociodemographic variables and social values

with employer–employee relationship problems. Variables with high odds ratios for employer–employee relationship problems need to be addressed in appropriate counseling and psychotherapy interventions. A qualitative interview study is recommended to probe some of the responses from the current survey.

Limitations of the study

The present study had 2 main limitations. First, we did not include an interview component with probes to explore further the participants' responses from the quantitative surveys. Second, we did not correlate our questionnaires with the equivalent scales or subscales in other well-researched instruments to establish the criterion-related validity of our measures. We suggest that these additional validations be done as a separate study in future to generate more Brunei norms for our instruments. Despite these shortcomings, the current study's findings have practical significance that may be relevant to policymakers and researchers in Brunei and elsewhere.

Acknowledgments

Thanks are extended to two research assistants who collected the data for the values research project.

The authors declare that they did not use any materials that needed permission from the copyright owners.

The study was supported by Grant No. UBD/BRC/7 dated 17 September 2013 from the BRC, Government of Brunei Darussalam, Brunei.

The data are owned by the BRC, funding agency, and cannot be released without permission from the participants. Contact the corresponding author on requests for access to the data.

Author contributions

All authors contributed toward data analysis, drafting and critically revising the paper and agree to be accountable for all aspects of the work.

Disclosure

The authors report no conflicts of interest in this work.

References

- Saari LM, Judge TA. Employee attitudes and job satisfaction. *Hum Resour Manage*. 2004;43(4):395–407.
- Wright TA, Cropanzano R, Denney PJ, Moline GL. When a happy worker is a productive worker: a preliminary examination of three models. *Can J Behav Sci*. 2002;34(3):146–150.
- Wright TA, Hobfoll S. Commitment, psychological well-being and job performance: an examination of conservation of resources (COR) theory and job burnout. *J Bus Manage*. 2004;9:389–406.
- Wright TA, Cropanzano R, Bonett DG. The moderating role of employee positive well-being on the relation between job satisfaction and job performance. *J Occup Health Psychol*. 2007;12(2):93–104.
- Asiyabi M, Mirabi V. Investigation of contributing factors in employees' desertion in power engineering consultants (Moshanir) company. *Interdiscip J Contemp Res Bus*. 2012;4(6):1183–1199.
- Auerbach SM, Gramling SE. *Stress Management: Psychological Foundations*. Englewood Cliffs, NJ: Prentice-Hall; 1998.
- Kang LS, Singh R. Stress at work: an assessment of the magnitude of various organizational stressors. *Indian J Ind Relat*. 2006;42(2):190–202.
- Rice PL. *Stress and Health*. 3rd ed. Pacific Grove, CA: Brooks/Cole; 1998.
- Punnett BJ, Greenidge D, Ramsey J. Job attitudes and absenteeism: a study in the English speaking Caribbean. *J World Bus*. 2007;42(2):214–227.
- Thirulogasundaram P, Sahu D. Job satisfaction and absenteeism interface in corporate sector: a study. *IOSR J Humanities Social Sci*. 2014;19(3):64–68.
- Stansfeld SA, Rael EG, Head J, Shipley M, Marmot M. Social support and psychiatric sickness absence: a prospective study of British civil servants. *Psychol Med*. 1997;27(1):35–48.
- Kivimäki M, Elovainio M, Vahtera J. Workplace bullying and sickness absence in hospital staff. *Occup Environ Med*. 2000;57(10):656–660.
- Braithwaite VA, Scott WA. Values. In: Robinson JP, Shaver PR, Wrightsman LS, editors. *Measures of Personality and Social Psychological Attitudes – Volume I*. San Diego: Academic Press; 1991:661–753.
- Triandis HC, Kilty KM, Shannmugam AV, Tanak Y, Vassiliou V. Cognitive structures and the analysis of values. In: Triandis HC, editor. *The Analysis of Subjective Culture*. New York, NY: Wiley; 1972:181–263.
- Inglehart R. The silent revolution in Europe: intergenerational change in post-industrial societies. *Am Pol Sci Rev*. 1971;65(4):991–1017.
- Inglehart R. *The Silent Revolution*. Princeton: Princeton University Press; 1977.
- Hofstede G. *Cultures' Consequences: International Differences in Work-Related Values*. Beverly Hills, CA: Sage; 1980.
- van Lange PAM. The pursuit of joint outcomes and equality in outcomes: an integrative model of social value orientation. *J Pers Soc Psychol*. 1999;77(2):337–349.
- Murphy RO, Ackermann KA, Handgraaf M. Measuring social value orientation. *Judgment Decis Making*. 2011;6(8):771–781.
- Robinson JP, Shaver PR, Wrightsman LS, editors. *Measures of Personality and Social Psychological Attitudes – Volume I*. San Diego: Academic Press; 1991.
- Rokeach M. *Value Survey*. Sunnyvale, CA: Halgren Tests; 1967.
- Braithwaite VA, Law HG. Structure of human values: Testing the adequacy of Rokeach value survey. *J Pers Soc Psychol*. 1985;49(1):250–263.
- The Social Research Centre & Australian National University. *World Values Survey*; 2012. Available from: <http://politicsir.cass.anu.edu.au/sites/politicsir.anu.edu.au/files/world-values-survey-2012-questionnaire.pdf>. Accessed March 19, 2017.
- Department of Economic Planning and Development. *Labor Force Survey 2014: Preliminary Report*. Bandar Seri Begawan: Prime Minister's Office; 2015.
- Yamane T. *Elementary Sampling Theory*. Englewood Cliffs, NJ: Prentice-Hall; 1967.
- Chand MB, Upadhyay BP, Maskey R. Biogas option for mitigating and adaptation of climate change. *Rentech Symp Compend*. 2012;1:5–9.
- Krejcie RV, Morgan DW. Determining sample size for research activities. *Educ Psychol Meas*. 1970;30(3):607–610.
- Rotter JB. A new scale for the measurement of interpersonal trust. *J Pers*. 1967;35(4):651–665.
- Alwin DF, Krosnick JA. The measurement of values in surveys: a comparison of ratings and rankings. *Public Opinion Quarterly*. 1985;49(4):535–552.

30. Mundia L, Matzin R, Mahalle S, Hamid MH, Osman RS. Contributions of sociodemographic factors to criminal behavior. *Psychol Res Behav Manag*. 2016;9:147–156.
31. Mundia L, Shahrill M, Jaidin JH, Jawawi R, Mahadi MA. Brunei's teacher education programs: insights into students' coping and help-seeking strategies to challenges. *Int J Mental Health Syst*. 2016;10(1):62.
32. Mundia L, Matzin R, Mahalle S, Hamid MHS, Osman RS. Recidivism in Brunei prisoners: estimating the rates and predicting reoffending. *Int J Emerg Mental Health Human Resilience*. 2016;18(2):742–749.

Psychology Research and Behavior Management

Publish your work in this journal

Psychology Research and Behavior Management is an international, peer-reviewed, open access journal focusing on the science of psychology and its application in behavior management to develop improved outcomes in the clinical, educational, sports and business arenas. Specific topics covered in the journal include: Neuroscience, memory and decision making; Behavior

modification and management; Clinical applications; Business and sports performance management; Social and developmental studies; Animal studies. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/psychology-research-and-behavior-management-journal>

Dovepress