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THE IMPACT OF AWARDS ON ACADEMIC EXCELLENCE: AN EMPIRICAL STUDY AMONG SCHOOLS UNDER THE GLOBAL SCHOOLS GROUP

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ABSTRACT

The purpose of this study was to establish to what extend awards won by the organization impacted the academic excellence of the schools under the Global Schools Group. A total of 18 schools under the Global Schools Group from five countries were involved in this study. A total of 420 staff, students and parents participated in this study. A self-administered questionnaire was used as the main instrument to gather data. The five aspects of the awards, i.e., type, number, relevancy, value, and prestige and reputation of awards were tested for their collective and independent relationship and impacts to academic excellence. As a result, this study revealed that there was a high level of achievement in terms of awards for academic excellence by the institutions. There were significant differences on academic excellence in accordance with countries where the schools situated, categories of the respondents, and programmes that the schools offered. The Pearson Correlation Analysis revealed that there were significant, strong, and positive relationships between all the factors of awards and academic excellence. The multiple regression analysis concluded that the awards had significant and strong impacts of 67.7%, of the variance changes on academic excellence. This study contributed to the enrichment of current literature on the impacts of awards on academic excellence. Based on these findings, several recommendations were made for the management of Global Schools Group, as well as for the future research.

Keywords: *Global Schools Group, awards, academic excellence.*

INTRODUCTION

Background of the Study

Awards represent a valuable strategic asset with considerable potential to impact both employee motivation and corporate performance, as indicated by motivation theory and a growing body of empirical research (Main, 2023; Gallus & Frey, 2017). These accolades signify recognition and bolster the perceived competence and social status of recipients. Additionally, awards play a crucial role in employee retention and serve to establish influential role models within organizations (Ryan & Deci, 2020). However, despite their significance, scholars in management and economics have only recently begun to explore the full extent of their impact and the underlying mechanisms at play (Frey & Gallus, 2017). Notably, research within the education industry remains limited, prompting a need to shift focus towards understanding how

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awards influence institutional success, particularly within the context of the Global Schools Group (GSG).

Since its inception in 2002, the Global Schools Group (formerly Global Schools Foundation, GSF) has been dedicated to nurturing young minds into future global leaders, contributing significantly to exemplary learning outcomes worldwide. The recognition received by GSF, now GSG, from the UK-based World Book of Records as the World's Most Awarded Network of Schools further underscores its commitment to excellence (Karekar, 2021). With over 570 awards for excellence in management processes, operational methodologies, and curriculum delivery, GSG has firmly established itself as a leader in the education sector (GSG, 2024). However, despite these achievements, there remains a gap in understanding the specific impact of these awards on the overall success of GSG schools, particularly concerning academic excellence. This gap highlights the need to explore the relationship between awards and academic achievement within GSG schools, prompting the formulation of four research questions aimed at uncovering the extent of this impact. Ultimately, the findings of this study offer valuable insights into the role of awards in enhancing institutional resilience and persistence within the GSG model of excellence.

Objective of the Study

The objective of this study is to establish to what extend awards won by the organization impacted the academic excellence among the schools under the Global Schools Group (GSG).

Research Questions

This study is conducted to address the following research questions:

i. What level of achievement have schools under GSG attained in terms of awards for academic excellence?
ii. Is there any significant difference in terms of academic excellence in accordance with the countries, categories of the respondents, gender, age groups, and programmes?
iii. Is there a significant relationship between awards and academic excellence in schools under GSG?
iv. To what extent have awards impacted academic excellence in schools under GSG?

Hypothesis

Ho1 There is no significant difference of the academic excellence in accordance with countries.
Ho2 There is no significant difference of the academic excellence in accordance with categories of the respondents.
Ho3 There is no significant difference of the academic excellence in accordance with gender.
Ho4 There is no significant difference of the academic excellence in accordance with age groups.
Ho5 There is no significant difference of the academic excellence in accordance with programmes.
Ho6 There is no significant relationship between the awards and the academic excellence in schools under GSG.

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Ho7 Awards have not impacted academic excellence in schools under GSG.

LITERATURE REVIEW

Motivation Theory

In examining the influence of awards on academic excellence, several motivation theories offer valuable insights into students' attitudes and behaviours toward their studies. Expectancy Theory, for instance, posits that individuals are more motivated to perform when they believe their efforts will lead to desirable outcomes (Main, 2023; Tarver, 2020; Vroom, 1964). Applied to academic awards, students perceive their dedication and hard work as pathways to receiving recognition, thereby enhancing their motivation to excel academically. This belief in the correlation between effort and reward serves as a potent motivator for students to strive for academic success.

Furthermore, Locke's Goal-setting Theory underscores the significance of setting specific and challenging goals to enhance performance (Debara, 2022; Locke & Latham, 2006; Locke, 1968). Academic awards often serve as tangible goals for students to aim for, providing clear markers of achievement within their academic journey. By striving toward these goals, students are motivated to elevate their academic standards and diligently work toward achieving them. This theory highlights the role of academic awards in guiding students' efforts toward specific academic targets and fostering a culture of excellence.

Reinforcement Theory further elucidates the impact of awards on academic excellence by emphasizing the role of positive reinforcement in shaping behaviour (Susanto et al., 2021; Skinner, 1969). Academic awards serve as positive reinforcements for students who demonstrate superior academic performance, reinforcing the behaviours and practices that lead to success. By recognizing and rewarding students' achievements, academic awards encourage them to continue their academic pursuits with vigour and determination.

Lastly, Intrinsic Motivation Theory underscores the importance of internal drives and personal fulfilment in motivating students to excel academically (Cherry, 2023; Ryan & Deci, 2000). While extrinsic rewards like awards can serve as external motivators, intrinsic motivation stemming from within oneself is equally significant. Academic awards symbolize achievement and recognition, tapping into students' innate desires for personal growth and academic success. By acknowledging students' efforts and accomplishments, academic awards fuel their intrinsic motivation to pursue excellence in their studies.

In summary, these motivation theories provide a robust theoretical framework (Figure 1) for understanding how awards can positively impact academic excellence by motivating students, guiding their efforts toward specific goals, reinforcing desired behaviours, and fostering intrinsic motivation. By recognizing and rewarding academic achievement, awards play a vital role in promoting a culture of academic excellence and inspiring students to reach their fullest potential.

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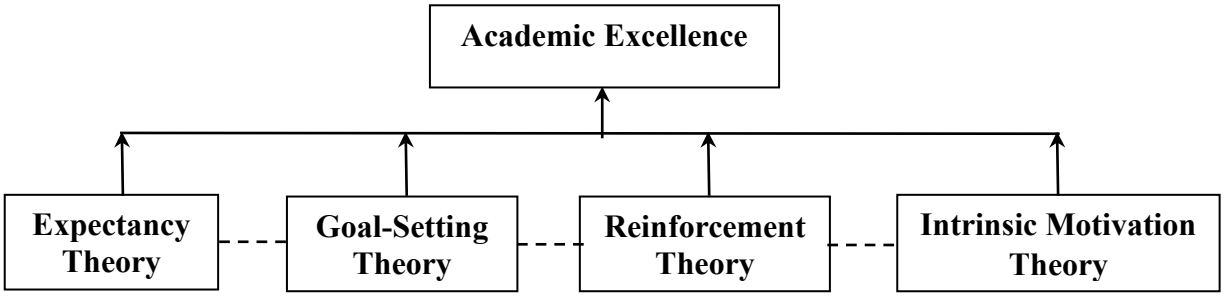

(*Source: Cherry, 2023; Main, 2023; Debara, 2022; Susanto et al., 2021*)

Figure 1: Theoretical Framework of Motivation Theories on Awards and Academic Excellence

Impact of Awards on Academic Excellence

Academic awards serve as pivotal components within the educational realm, offering tangible recognition for students' academic accomplishments and contributions to their academic communities. Recent studies have delved deeply into the influence of these awards on academic excellence, shedding light on the intricate dynamics of recognition and achievement within educational contexts.

In a comprehensive meta-analysis by Johnson and Choudhury (2023), the investigation into the impact of academic awards on student performance and motivation revealed a robust positive correlation. Their findings underscored that recipients of academic awards showcased heightened levels of motivation and engagement, echoing the sentiments echoed by Li and Wang (2023) in their longitudinal study. Similarly, Smith and Jones (2022), and Scherrer, et al. (2020) observed a significant link between academic awards and sustained improvements in student achievement over time. Exploring the effect of student recognition of excellence within competency-based educational models, Bliven and Jungbauer (2021) provided further evidence suggesting that awards can shape student performance and engagement positively. Case study findings by Lee and Park (2021) emphasized the constructive influence of academic awards on student engagement and classroom conduct, particularly among high school students. In the realm of community college education, Fong et al. (2017) highlighted the pivotal role of recognition in shaping academic outcomes, adding weight to the notion that academic awards are instrumental in driving student success.

Concurrently, Chen and Liu's (2022) meta-analytic review reinforced the notion of academic awards as motivational drivers, noting a significant positive effect on student motivation and persistence. Further studies, including those by Kim and Park (2021), Garcia and Smith (2020), and Wang and Chen (2020), echoed similar sentiments, indicating that academic awards correlate positively with student well-being, perceptions of school climate, and motivation levels. Notably, Brown and Wilson's (2019) comparative analysis revealed a tangible association between academic awards and higher graduation rates, emphasizing the enduring impact of recognition on student outcomes. Johnson and Brown's (2019) qualitative exploration into student engagement further underscored the motivational influence of academic awards, highlighting their pivotal role in nurturing a sense of accomplishment and community engagement among students.

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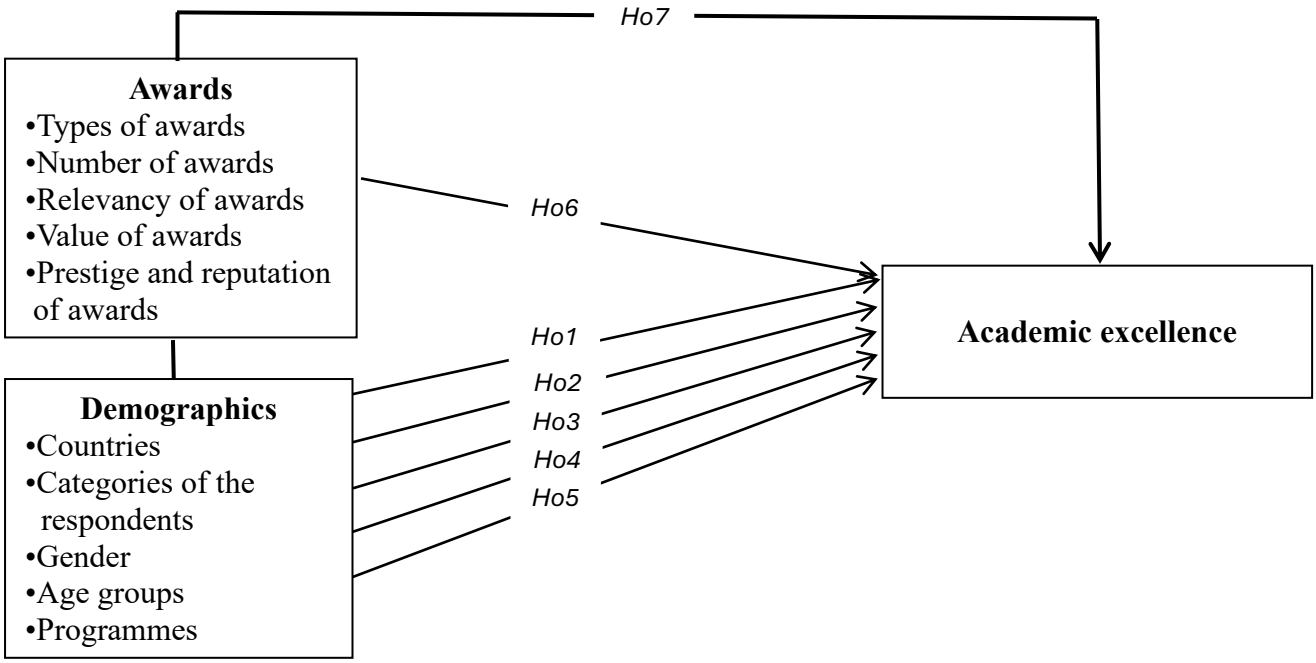
Collectively, the current body of literature underscores the positive impact of academic awards on student performance and motivation across diverse educational settings. These findings underscore the critical importance of recognizing and rewarding students' achievements as a means of fostering academic success and promoting positive learning outcomes within educational settings.

Conceptual Framework

Figure 2 shows the conceptual framework for this study. Five aspects of awards, namely, types of awards, number of awards, relevancy of awards, value of awards, and prestige and reputation of awards, and five demographic aspects, i.e., countries, categories of the respondents, gender, age groups, and programmes served as the independent variables, while academic excellence is the dependent variable.



(*Source: Adapted from Johnson & Choudhury, 2023; Li & Wang, 2023; Smith & Jones, 2022; Bliven & Jungbauer, 2021)*

Figure 2: Conceptual Framework

METHODOLOGY

Research Design

The objective of this study is to establish the extend that awards won by the organization impacted the academic excellence among the schools under the Global Schools Group. This is a retrospective longitudinal quantitative study of all awards won by GSG's schools from 2008 to December 2023. Quantitative research method was employed with the emphasis on the objective measurements and numerical analysis. Both descriptive and inferential analyses were used to test the hypotheses and subsequently address the research questions. A cross sectional

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content analysis study approach was also implemented on the data available from 18 selected GSG's school campuses that had won a minimum of five awards with the establishment of three years across five different countries.

Research Population and Sample

The population of this study includes academic staff, students, and parents from 18 GSG's school campuses over five different countries totalling of 23089 (GSG, 2024). In term of sampling method, this study applied a purposive sampling method with proportionate random approach (Quinlan et al., 2024) to determine the minimum sample size. This method was chosen as it aimed to delve with the key factors that potentially influenced by the awards received within the targeted research area. The calculation of the sample size is as follows:

$$\boldsymbol{S = \frac{X^2 NP(1-P)}{d^2(N-1) + X^2 P(1-P)}}$$

Where,

$\boldsymbol{S}$	=	required sample size.
$\boldsymbol{X^2}$	=	the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).
$\boldsymbol{N}$	=	the population size.
$\boldsymbol{P}$	=	the population proportion (.50).
$\boldsymbol{d}$	=	the degree of accuracy expressed as a proportion (.05).

$$\boldsymbol{S = \frac{X^2 NP(1-P)}{d^2(N-1) + X^2 P(1-P)}}$$

$$\boldsymbol{S = \frac{3.841 \times 23089 \times 0.5(1-0.5)}{0.05^2(23089-1) + 3.841 \times 0.5(1-0.5)}}$$

$$\boldsymbol{S = 377.82}$$

$$\boldsymbol{S \approx 378}$$

Hence, the minimum sample size as calculated is 378. However, to avoid the "winner's curse" problem that may occur later at the regression analysis, the researchers had taken a precaution measure by targeting 600 samples instead – an increase of 58.7% of the sample size in this study. Therefore, the online version of the questionnaires was distributed to the staff, students, and parents from the 18 GSG's school campuses over five different countries. However, only 420 valid questionnaires were returned with a 70% in response rate. Referring to the Krejcie and Morgan's Table for Determining Sample Size (Krejcie & Morgan, 1970), this sample size is sufficient.

Research Instrument

In this study, we employed a self-administered questionnaire adapted from previous studies by Johnson and Choudhury (2023), Li and Wang (2023), Smith and Jones (2022), and Bliven and Jungbauer (2021) as the primary data collection instrument. The questionnaire, comprising

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three sections (Section A, Section B, and Section C), encompassed a total of 44 questions. Section A solicited demographic information from the respondents, including the country of their school, category, gender, age group, and programme. Section B focused on inquiries regarding the awards received by GSG's schools, while Section C delved into aspects of academic excellence. The questionnaires were disseminated via Google Forms to reach the respondents efficiently.

To assess the reliability and construct validity of the draft questionnaire, a pilot study involving 30 respondents from the research population was conducted. The results of the pilot study demonstrated high reliability, with Cronbach's Alpha coefficients exceeding the acceptable threshold for both the Awards ($\alpha = 0.899$) and Academic Excellence ($\alpha = 0.861$) sections. The overall Cronbach's Alpha coefficient for the questionnaire was 0.874, indicating strong internal consistency. Additionally, item analysis indicated that all questionnaire items achieved statistical significance at the 0.05 level. However, minor revisions were made to items 14 and 15 to enhance content validity further. Furthermore, the results of factor analysis provided support for adequate construct validity, affirming the suitability of the questionnaire for capturing the intended constructs.

Statistical Analysis

Before choosing a statistical analysis or test, the issue of whether the data are parametric or not has to be addressed (Quinlan et al., 2024). In this context, all data in this study are parametric. Therefore, there were five types of analyses administrated in this study, namely, Descriptive Analysis, Independent Sample T-Test, One-way ANOVA, Pearson Correlation Analysis and Multiple Linear Regression Analysis. Descriptive Analysis was carried out on the distribution of the demographic variables and the level of achievement of awards. Independent Sample T-Test and One-way ANOVA tests were conducted to test the difference in terms of academic excellence in accordance with the demographic factors of the schools that have won awards (Ho1 – Ho5). Correlation Analysis was conducted to test hypothesis Ho6. It was further strengthened by Multiple Linear Regressions Analysis to test hypothesis Ho7, and finally a model was developed as follow:

$$\mathbf{ACA\_EXCL. = \alpha + \beta_1 TYPE + \beta_2 NUM + \beta_3 REV + \beta_4 VALUE + \beta_5 PR}$$

Where α is constant, ACA_EXCL. refers to academic excellence, TYPE refers to types of awards, NUM refers to number of awards received, REV refers to relevancy of the awards, VALUE refers to value of the awards, PR refers to prestige and reputation of awards and $\beta_{1\text{-}5}$ are the coefficients to be tested.

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RESULT AND ANALYSIS

Descriptive Analysis

In this study, the descriptive analysis consists of detailed demographic information of the respondents and level of achievement in awards.

Demographic Profile of the Respondents

Table 1: Demographic Profile of the Respondents

Factor	Category	Frequency	Percentage
Countries	Singapore	83	19.8%
	Malaysia	71	16.9%
	Japan	59	14.0%
	India	40	9.5%
	UAE	167	39.8%
Categories	Staff	128	30.5%
	Student	251	59.8%
	Parent	41	9.7%
Gender	Male	191	45.5%
	Female	229	54.5%
Age groups	< 21	251	59.8%
	21-30	3	0.7%
	31-40	66	15.7%
	41-50	81	19.3%
	51-60	19	4.5%
Programmes	CBSC	323	76.9%
	IGCSE	66	15.7%
	IB	31	7.4%

Table 1 presents an overview of the respondent demographics. The data indicate that the largest proportion of respondents, comprising 167 individuals or 39.8%, originated from the United Arab Emirates (UAE). Following this, there were 83 respondents (19.8%) from Singapore, 71 (16.9%) from Malaysia, 59 (14.0%) from Japan, and 40 (9.5%) from India. Regarding respondent roles, the majority were students, accounting for 251 participants or 59.8%. Staff constituted 128 respondents, representing 30.5%, while parents comprised 41 individuals, constituting 9.7% of the total. In terms of gender distribution, the study included more female respondents (229, 54.5%) than male respondents (191, 45.5%). Regarding age demographics, the majority of respondents were below 21 years old, totalling 251 individuals (59.8%). Additionally, 81 respondents (19.3%) fell within the 41-50 age bracket, while 66 (15.7%) were aged 31-40, 19 (4.5%) were aged 51-60, and only 3 (0.7%) were aged 21-30. Programme-wise, the data indicated that the majority of respondents were enrolled in the CBSC programme (323, 76.9%), followed by IGCSE (66, 15.7%), and IB (31, 7.4%).

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The Level of Achievement in Awards for Academic Excellence

The first research question of this study is: "What level of achievement have schools under GSG attained in terms of awards for academic excellence?" To address this inquiry, five items indicating types of awards, number of awards received, relevancy of awards, value of awards, prestigious award titles, and widespread recognition within the schools were tailored for this purpose. The results are presented in Table 2.

Table 2: Mean and Standard Deviation of the Level of Achievement in Awards for Academic Excellence

	Mean ($\bar{x}$)	***Standard Deviation (SD)***
Awards		
•Types of awards	4.0442	.71424
•Number of awards	4.2551	.76388
•Relevancy of the awards	4.1455	.74322
•Value of awards	4.0982	.69871
•Prestige and Reputation of awards	4.6713	.73529
Overall	**4.2429**	**.73107**
Valid N (listwise): 420		

Table 2 outlines the mean scores and standard deviations, providing insight into the achievement levels of GSG's schools concerning awards for academic excellence. The overall mean score was 4.2429 (SD = .73107), surpassing the expected mean of 4.0. Notably, the prestige and reputation of these awards received the highest mean score of 4.6713 (SD = .73529), indicating that, on average, the awards garnered by these schools are esteemed at 93.4% of prestigious award titles, marking this aspect as the highest-rated among all awards. Following closely, the mean score for the number of awards stood at 4.2551 (SD = .76388), suggesting that, on average, these schools have received approximately 4.2551 awards since their establishment. Additionally, the relevancy of awards obtained a mean score of 4.1455 (SD = .74322), signifying that approximately 82.9% of the awards received by the schools were relevant to their institutions. The value of awards secured a mean score of 4.0982 (SD = .69871), indicating a high level of appreciation (approximately 81.9%) for the awards received by the schools. Lastly, the mean value for the types of awards received was 4.0442 (SD = .71424), suggesting that, on average, all types of awards received by the schools are rated at approximately 80.9% importance. In summary, the level of achievement in awards for academic excellence among GSG's schools is deemed high.

Inferential Analysis and Hypothesis Testing

The Difference of the Academic Excellence in Accordance with Demographic Factors

The second research question of this study is “Is there any significant difference in terms of academic excellence in accordance with the countries, categories of the respondents, gender, age groups, and programmes?” To address this inquiry, hypothesis Ho1 – Ho5 were set to test

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the significant difference of the academic excellence in accordance with these five demographic factors.

Hypothesis Ho1:
There is no significant difference of the academic excellence in accordance with countries.

Table 3: Mean Scores and F-Values Difference on Academic Excellence in Accordance with Countries

ANOVA

Academic excellence

	Sum of Square	**df**	**Mean Square $(\bar{x})^2$**	**F**	**Sig.**
Between groups	9.872	4	3.291	6.689	.001
Within groups	204.387	415	.492		
Total	214.258	419			

Multiple Comparisons

Dependent Variable: Academic excellence
Tukey HSD

(I) Country where the school situated	(J) Country where the school situated	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Singapore	Malaysia	.00085	.11331	1.000	-.3096	.3113
	Japan	.23255	.11936	.294	-.0945	.5596
	India	-.26669	.13492	.279	-.6363	.1030
	UAE	-.18359	.09404	.292	-.4412	.0741
Malaysia	Singapore	-.00085	.11331	1.000	-.3113	.3096
	Japan	.23170	.12348	.332	-.1066	.5700
	India	-.26754	.13857	.303	-.6472	.1121
	UAE	-.18444	.09922	.341	-.4563	.0874
Japan	Singapore	-.23255	.11936	.294	-.5596	.0945
	Malaysia	-.23170	.12348	.332	-.5700	.1066
	India	-.49924*	.14356	.005	-.8926	-.1059
	UAE	-.41614*	.10607	.001	-.7068	-.1255
India	Singapore	.26669	.13492	.279	-.1030	.6363
	Malaysia	.26754	.13857	.303	-.1121	.6472
	Japan	.49924*	.14356	.005	.1059	.8926
	UAE	.08310	.12332	.962	-.2548	.4210
UAE	Singapore	.18359	.09404	.292	-.0741	.4412
	Malaysia	.18444	.09922	.341	-.0874	.4563
	Japan	.41614*	.10607	.001	.1255	.7068
	India	-.08310	.12332	.962	-.4210	.2548

**. The mean difference is significant at the 0.01 level.*

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Analysis from Table 3 indicates a notable discrepancy in academic excellence among countries, as determined by one-way ANOVA [F (4, 415) = 6.689, p < .01]. Subsequent Tukey post-hoc analysis reveals statistically significant differences in academic achievement between schools from Japan and both India (p < .01) and the UAE (p < .01). However, no significant differences are observed between schools from other countries (p > .05). Specifically, schools from Japan exhibit significantly lower academic excellence (mean = 3.7458) compared to those from India (mean = 4.2450 ± .49924, p < .01) and the UAE (mean = 4.1619 ± .41614, p < .01). Consequently, the null hypothesis Ho1, suggesting no significant difference in academic excellence across countries, is rejected.

Hypothesis Ho2:
There is no significant difference of the academic excellence in accordance with categories of the respondents.

Table 4: Mean Scores and F-Values Difference on Academic Excellence in Accordance with Categories of Respondents

ANOVA

Academic excellence

	Sum of Squares	**df**	**Mean Square $(\bar{x})^2$**	**F**	**Sig.**
Between Groups	3.397	2	1.698	3.356	.035
Within Groups	210.861	417	.506		
Total	214.258	419			

Multiple Comparisons

Dependent Variable: Academic excellence
Tukey HSD

(I) Category of respondents	(J) Category of respondents	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Staff	Student	.00198	.07709	.901	-.1793	.1833
	Parent	.30427*	.12745	.046	.0045	.6041
Student	Staff	-.00198	.07709	.901	-.1833	.1793
	Parent	.30228*	.11961	.032	.0210	.5836
Parent	Staff	-.30427*	.12745	.046	-.6041	-.0045
	Student	-.30228*	.11961	.032	-.5836	-.0210

**. The mean difference is significant at the 0.05 level.*

Table 4 illustrates a significant discrepancy in academic excellence across respondent categories, as revealed by one-way ANOVA [F (2, 417) = 3.356, p < .05]. Subsequent Tukey post-hoc analysis disclosed notable disparities in perceived academic excellence between parents and staff (p = .046), as well as between parents and students (p = .032). However, no significant differences emerged in perceived academic excellence between staff and students (p > .05). Parents perceived academic excellence to be significantly lower (mean = 3.7707)

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compared to staff (mean = 4.0750 ± .30427, $p < .05$) and students (mean = 4.0730 ± .30228, $p < .05$). Consequently, the null hypothesis Ho2, positing no significant difference in academic excellence across respondent categories, is rejected.

Hypothesis Ho3:
There is no significant difference of the academic excellence in accordance with gender.

Table 5: Mean Scores and T-Values Difference on Academic Excellence in Accordance with Gender

Group Statistics

	Gender	N	Mean ($\bar{x}$)	Std. Deviation	Std. Error Mean
Academic excellence	Male	191	4.0314	.64061	.04635
	Female	229	4.0548	.77129	.05086

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Academic excellence	Equal variances assumed	10.322	.001	-.334	418	.739	-.02337	.06999	-.16095	.11422
	Equal variances not assumed			-.340	418	.734	-.02337	.06881	-.15863	.11189

The results from the T-test analysis presented in Table 5 indicate that there is no statistically significant difference in the perception of academic excellence between male and female respondents ($t = -.334$, $df = 418$, $p > .05$). Both male ($\bar{x} = 4.0314$, SD = .64061) and female respondents ($\bar{x} = 4.0548$, SD = .77129) exhibited similar perceptions regarding the academic excellence of their respective schools. As a result, the null hypothesis Ho3, which posited no significant difference in academic excellence according to gender, cannot be rejected.

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Hypothesis Ho4:
There is no significant difference of the academic excellence in accordance with age groups.

Table 6: Mean Scores and F-Values Difference on Academic Excellence in Accordance with Age Groups

ANOVA

Academic excellence

	Sum of Squares	**df**	**Mean Square $(\bar{x})^2$**	**F**	**Sig.**
Between Groups	.474	3	.158	.752	.825
Within Groups	87.474	416	.210		
Total	87.948	419			

Table 6 shows the ANOVA Test results on the difference in academic excellence in accordance with age groups. We can see that the significance value is 0.825 (p = .825), which is greater than 0.05 (p > .05). Therefore, there is no statistically significant difference on the mean scores in academic excellence between the different age groups [F (3, 416) = .752, p > .05]. Hence, we can summarise that staff, students, and parents from GSG's schools of all ages have similar perception on the academic excellence of their schools. Therefore, the null hypothesis Ho4: There is no significant difference of the academic excellence in accordance with age groups is failed to be rejected.

Hypothesis Ho5:
There is no significant difference of the academic excellence in accordance with programmes.

Table 7: Mean Scores and F-Values Difference on Academic Excellence in Accordance with Programmes

ANOVA

Academic excellence

	Sum of Squares	**df**	**Mean Square $(\bar{x})^2$**	**F**	**Sig.**
Between Groups	45.196	2	22.598	55.798	.000
Within Groups	169.062	417	.405		
Total	214.258	419			

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Multiple Comparisons

Dependent Variable: Academic excellence
Tukey HSD

(I) Programme	(J) Programme	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
CBSE	IGCSE	.34220*	.08589	.000	.1402	.5442
	IB	1.21991*	.11956	.000	.9387	1.5011
IGCSE	CBSE	-.34220*	.08589	.000	-.5442	-.1402
	IB	.87771*	.13847	.000	.5520	1.2034
IB	CBSE	-1.21991*	.11956	.000	-1.5011	-.9387
	IGCSE	-.87771*	.13847	.000	-1.2034	-.5520

**. The mean difference is significant at the 0.01 level.*

Table 7 reveals a significant F-value of 55.798 with a p-value of 0.00 ($p < .01$), indicating a statistically significant difference in mean scores among the various academic programmes in terms of academic excellence [$F (2, 417) = 55.798$, $p < .01$]. Subsequent Tukey Post Hoc Test results demonstrate that respondents from the CBSE programme exhibit significantly higher perceptions of academic excellence achievement in their schools compared to those from the ICGSE and IB programmes ($p < .01$). Specifically, CBSE respondents scored 0.3422 and 1.21991 units higher in perception of academic excellence achievement compared to respondents from the ICGSE and IB programmes, respectively. Thus, the null hypothesis Ho5, positing no significant difference in academic excellence perception based on programme, is rejected.

The Relationship between Awards and Academic Excellence

The third research question of this study investigates the relationship between awards and academic excellence in schools under GSG. To address this inquiry, the null hypothesis Ho6 was formulated, stating that there is no significant relationship between awards and academic excellence in GSG's schools. To assess the strength of this relationship, the Correlation Value Interpretation Table developed by Bartlett, Kontrlik, and Hingins (2001) was consulted (Table 8). Additionally, the parametric assumptions of the dataset were carefully considered before applying the Pearson Product-Moment Correlation to determine the significance of the relationships between the variables.

Table 8: **Correlation Value Interpretation**

Value (r)	Strength
± 0.70-0.99	Very strong
± 0.50-0.69	Strong
± 0.30-0.49	Moderately strong
± 0.10-0.29	Weak
± 0.01-0.09	Very weak

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Table 9: Correlations between Awards and Academic Excellence

Correlations

		ACA_EXCL	Types of awards	Number of awards	Relevancy of awards	Value of awards	Prestige and reputation of awards
Academic excellence (ACA_EXCL)	Pearson Correlation	1	.823**	.803**	.781**	.758**	.741**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	420	420	420	420	420	420
Types of awards	Pearson Correlation	.823**	1	.874**	.855**	.789**	.800**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	420	420	420	420	420	420
Number of awards	Pearson Correlation	.803**	.874**	1	.884**	.844**	.811**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	420	420	420	420	420	420
Relevancy of awards	Pearson Correlation	.781**	.855**	.884**	1	.856**	.781**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	420	420	420	420	420	420
Value of awards	Pearson Correlation	.758**	.789**	.844**	.856**	1	.749**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	420	420	420	420	420	420
Prestige and Reputation of awards	Pearson Correlation	.741**	.800**	.811**	.781**	.749**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	420	420	420	420	420	420

***. Correlation is significant at the 0.01 level (2-tailed).*

From Table 9, a significant, positive, and strong correlation was observed between types of awards and academic excellence ($r = .823$, $n = 420$, $p < .01$). This result suggests that for each unit increase in the different types of awards received by GSG's schools, there is an increase of 0.823 units in the level of achievement in academic excellence, and vice versa. This finding aligns with prior research (Johnson & Choudhury, 2023; Smith & Jones, 2022; Bliven & Jungbauer, 2021; Fong et al., 2017).

Similarly, a significant, positive, and strong correlation was found between the number of awards and academic excellence ($r = .803$, $n = 420$, $p < .01$). This indicates that a higher number of awards received is associated with better achievement in academic excellence for the schools. This finding is consistent with previous studies (Johnson & Choudhury, 2023; Smith & Jones, 2022; Garcia & Smith, 2020).

Likewise, a significant, positive, and strong correlation was observed between the relevancy of awards and academic excellence ($r = .781$, $n = 420$, $p < .01$). This suggests that higher relevancy of the awards received is associated with increased achievement in academic excellence for the schools. This finding is supported by previous research (Johnson & Choudhury, 2023; Chen & Liu, 2022; Smith & Jones, 2022).

Furthermore, a significant, positive, and strong correlation was found between the value of awards and academic excellence ($r = .758$, $n = 420$, $p < .01$). This indicates that any increase in the value of awards received is associated with increased achievement in academic

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excellence for the schools. This finding is consistent with prior studies by Johnson and Choudhury (2023) and Bliven and Jungbauer (2021).

Finally, a significant, positive, and strong correlation was observed between the prestige and reputation of awards and academic excellence ($r = .741$, $n = 420$, $p < .01$). This suggests that higher recognition of awards received is associated with higher achievement in academic excellence for the schools. This finding is supported by previous research (Johnson & Choudhury, 2023; Garcia & Smith, 2020; Brown & Wilson, 2019).

In summary, all factors related to awards demonstrated significant, positive, and strong correlations with academic excellence. Therefore, the null hypothesis Ho6, stating that there is no significant relationship between awards and academic excellence in schools under GSG, is rejected.

The Impact of Awards on Academic Excellence

The fourth research question of this study investigates the extent to which awards have impacted academic excellence in schools under GSG. To address this inquiry, the null hypothesis (Ho7) was formulated, positing that awards have not influenced academic excellence in these schools. Regression analysis was employed to examine the impact of the independent variables, namely the types of awards, number of awards, relevancy of the awards, value of the awards, and prestige and reputation of awards, on the dependent variable, academic excellence. The results of this analysis are presented in Table 10.

Table 10: Correlation and Multiple Regressions of Awards on Academic Excellence

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.823[a]	.677	.667	.41189

a. Predictors: (Constant), Type of awards, Number of awards, Relevancy of awards, Value of awards, Prestige and reputation of awards.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	143.851	5	28.770	169.235	.000[b]
	Residual	70.407	414	.170		
	Total	214.258	419			

a. Dependent Variable: Academic excellence
b. Predictors: (Constant), Type of awards, Number of awards, Relevancy of awards, Value of awards, Prestige and reputation of awards.

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Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.258	.153		1.687	.000
	Types of awards	.301	.051	.087	1.976	.000
	Number of awards	.337	.056	.144	2.453	.000
	Relevancy of awards	.490	.058	.205	3.290	.000
	Value of awards	.473	.061	.183	2.853	.000
	Prestige & reputation of awards	.567	.053	.278	5.053	.000

a. *Dependent Variable: Academic excellence*

Table 10 presents the results of the multiple regression analysis examining the impact of awards on academic excellence. The Model Summary table indicates that all five independent variables related to awards significantly predict academic excellence [F (5, 414) = 169.235, $p < .01$]. Collectively, these predictor variables account for 67.7% of the variance in academic excellence ($R^2 = .677$, Adj. $R^2 = .667$, $p < .01$). This implies that 32.3% of the variance in academic excellence is attributable to factors other than awards. Notably, prestige and reputation of awards emerge as the strongest predictor of academic excellence ($\beta = .567$, $p < .01$). Additionally, relevancy of awards ($\beta = .490$, $p < .01$), value of awards ($\beta = .473$, $p < .01$), number of awards ($\beta = .337$, $p < .01$), and type of awards ($\beta = .301$, $p < .01$) also demonstrate significant predictive power for academic excellence. Hence, the null hypothesis Ho7: Awards have not impacted academic excellence in schools under GSG, is rejected. These findings align with existing literature on academic excellence (Johnson & Choudhury, 2023; Chen & Liu, 2022; Smith & Jones, 2022; Bliven & Jungbauer, 2022; Garcia & Smith, 2020; Brown & Wilson, 2019; Fong et al., 2017). Based on these results, a regression model for academic excellence in GSG's schools is developed.

ACA_EXCL. = 0.258 + 0.301TYPE + 0.337NUM + 0.490REV + 0.473VALUE + 0.567PR

Where, ACA_EXCL. denotes the academic excellence, TYPE refers to type of awards, NUM refers to number of awards, REV refers to relevancy of the awards, VALUE refers to value of the awards, and PR refers to prestige and reputation of awards.

CONCLUSION AND RECOMMENDATIONS

The study has provided valuable insights into the relationship between awards and academic excellence among schools under the Global Schools Group (GSG). Firstly, it was found that GSG's schools have achieved a high level of recognition and success in terms of awards for academic excellence. This indicates the commitment and dedication of these institutions towards fostering a culture of excellence within their academic communities. Secondly, the study revealed significant differences in academic excellence across various demographic factors such as countries, categories of respondents, and programmes. These differences highlight the diverse perspectives and experiences within the GSG network and underscore the importance of considering demographic factors in assessing academic achievement. Furthermore, the analysis demonstrated a significant positive relationship between awards and

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academic excellence, with all factors related to awards showing strong correlations with academic achievement. Finally, the multiple regression analysis confirmed that awards significantly predict academic excellence, with prestige and reputation of awards emerging as the strongest predictor.

Based on the findings of this study, several recommendations can be made to further enhance the impact of awards on academic excellence within the GSG network. Firstly, it is imperative for GSG's schools to continue their efforts in pursuing and celebrating academic excellence through various forms of recognition and awards. This includes fostering a supportive environment that encourages students, staff, and parents to strive for excellence and actively participate in award programmes. Additionally, the findings suggest the importance of considering demographic factors such as country of operation, respondent category, and programme type when designing and implementing award initiatives. Tailoring award programmes to meet the unique needs and preferences of diverse stakeholders can help maximize their effectiveness in promoting academic excellence. Furthermore, the study highlights the need for ongoing research and evaluation to monitor the impact of awards on academic outcomes and identify areas for improvement. By continuously assessing and refining award programmes, GSG's schools can ensure they remain effective tools for enhancing academic excellence and driving positive educational outcomes. Overall, this study underscores the value of awards as a strategic resource for promoting academic excellence within the GSG network and beyond.

REFERENCES

Bartlett, J.E., Kontrlik, J.W., & Hinggins, C.C. (2001). *Organizational research: Determining appropriate sample size in survey research.* Retrieved August 12, 2018, from www.ferdinandnabiswa.com/Documents/DEM810s amplesize%20deternimation.pdf

Bi, W., Chan, H. F., & Torgler, B. (2019). Self-esteem, self-symbolizing, and academic recognition: Behavioral evidence from curricula vitae. *Scientometrics, 119*(1), 495–525. https://doi.org/10.1007/s11192-019-03037-8

Bliven, A. M., & Jungbauer, M. (2021). The impact of student recognition of excellence to student outcome in a competency-based educational model. *The Journal of Competency-Based Education*. https://doi.org/10.1002/cbe2.1264

Brown, K. M., & Wilson, C. R. (2019). The impact of academic awards on graduation rates: A comparative analysis. *Educational Evaluation and Policy Analysis, 41*(4), 555-578. https://doi.org/10.3102/0162373719828079

Chen, H., & Liu, Y. (2022). The effect of academic awards on student motivation and persistence: A meta-analytic review. *Educational Research Review, 38*, 1-15. https://doi.org/10.1016/j.edurev.2021.100441

Cherry, K. (2023, May 3). *Intrinsic motivation: How internal rewards drive behavior*. Verywellmind.com. https://www.verywellmind.com/what-is-intrinsic-motivation-2795385

Submitted: 12 March 2024
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Accepted: 22 March 2024

Debara, D. (2022, June 22). Goal-setting theory: Why it's important, and how to use it at work. *Betterup.com Blog*. https://www.betterup.com/blog/goal-setting-theory

Fong, C. J., Davis, C. W., Kim, Y., Kim, Y. W., Marriott, L., & Kim, S. (2017). Psychosocial factors and community college student success: A meta-analytic investigation. *Review of Educational Research, 87*(2), 388–424. https://doi.org/10.3102/0034654316653479

Frey, B. S., & Gallus, J. (2017). Towards an economics of awards. *Journal of Economic Surveys, 31*(1), 190–200. https://doi.org/10.1111/joes.12127

Gallus, J., & Frey, B. S. (2017). Awards as strategic signals. *Journal of Management Inquiry, 26*(1), 76–85. https://doi.org/10.1177/1056492616658127

Garcia, M., & Smith, R. (2020). The impact of academic awards on student perceptions of school climate: A multilevel analysis. *School Effectiveness and School Improvement, 31*(4), 589-604. https://doi.org/10.1080/09243453.2020.1720558

Global Schools Group. (2024, January). *Nurturing the leaders of tomorrow*. https://globalschools.com/

Johnson, E. R., & Choudhury, S. R. (2023). The impact of academic awards on student performance and motivation: A meta-analysis. *Educational Psychology Review, 35*(1), 45-68. https://doi.org/10.1007/s10648-022-09628-4

Johnson, L., & Brown, C. (2019). Academic awards and student engagement: A qualitative study. *Journal of Research in Education, 29*(3), 345-362. https://doi.org/10.1080/00220671.2019.1587683

Karekar, R. (August 3, 2021). *UK-based World Book of Records recognises GSF Schools as World's Most Awarded Network of Schools*. Newswire. https://www.newswire.com/news/uk-based-world-book-of-records-recognises-gsf- schools-as-worlds-most-21462082

Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*. https://doi.org/10.1177/001316447003000308

Kim, S., & Park, H. (2021). Academic awards and student well-being: A cross-sectional study. *Journal of Youth and Adolescence, 50*(3), 451-465. https://doi.org/10.1007/s10964-020-01314-3

Lee, S., & Park, J. (2021). The effects of academic awards on student engagement and classroom behavior: A case study of high school students. *Journal of School Psychology, 78*, 102-115. https://doi.org/10.1016/j.jsp.2020.11.009

Li, M., & Wang, J. (2023). Academic awards and student academic achievement: A longitudinal study. *Journal of Educational Psychology, 115*(2), 298-312. https://doi.org/10.1037/edu0000538

Submitted: 12 March 2024
Reviewed: 21 March 2024
Accepted: 22 March 2024

Locke, E. A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior and Human Performance, 3*(2), 157-189. https://doi.org/10.1016/0030-5073(68)90004-4

Locke, E. A., & Latham, G. P. (2006). New Directions in Goal-Setting Theory. *Association for Psychological Science, 5*(15), 265-268. https://rb.gy/a0lxr7

Main, P. (2023, July 14). Discover Expectancy Theories: Understand how motivation, performance, and outcomes are interconnected. Learn to apply these principles effectively. *Structural Learning*. https://www.structural-learning.com/post/expectancy-theories

Quinlan, C., Babin, B., Carr, J., Griffin, M., & Zikmund, W.G. (2024). *Business Research Methods (3rd Edition)*. Cengage Learning.

Ren, J., Shi, Y., Shatte, A., Xia, F., & Kong, X. J. (2022). The significance and impact of winning an academic award: a study of early career academics. *Proceedings of the 22nd ACM/IEEE Joint Conference on Digital Libraries*, 31, 1-11. https://dl.acm.org/doi/10.1145/3529372.3530913

Ryan, R.M., & Deci, E.L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*. https://doi.org/10.1016/j.cedpsych.2020.101860

Scherrer, V., Preckel, F., Schmidt, I., & Elliot, A. J. (2020). Development of achievement goals and their relation to academic interest and achievement in adolescence: A review of the literature and two longitudinal studies. *Developmental Psychology, 56*(4), 795.

Smith, A. L., & Jones, B. D. (2022). The influence of academic awards on student achievement: a longitudinal study. *Journal of Educational Research, 115*(3), 389-405. https://doi.org/10.1080/00220671.2021.1912103

Skinner, B. F. (1969). *Contingencies of reinforcement: A theoretical analysis*. Prentice-Hall. https://rb.gy/dyw1td

Susanto, S., Lim, B., Linda, T., Tarigan, S. A., & Wijaya, E. (2021). Antecedents' employee performance: A perspective Reinforcement Theory. *Journal of Industrial Engineering & Management Research, 2*(4), 1 - 14. https://doi.org/10.7777/jiemar.v2i4.156

Tarver, E. (2020, February 8). *Vroom's Expectancy Theory of Motivation: Definition, principles & uses*. https://rb.gy/a0lxr7

Wang, Y., & Chen, L. (2020). Exploring the relationship between academic awards and student motivation: A cross-sectional study. *Educational Sciences: Theory & Practice, 20*(6), 1-18. https://doi.org/10.12738/estp.2020.6.029

Vroom, V. H. (1964). *Work and Motivation*. Wiley, New York. https://www.scribd.com/document/408299722/WORK-AND-MOTIVATION-Victor-Vroom-pdf