MYP Coordinators: Differences in Job Satisfaction Levels based on the Number of IB Programmes

Megel R Barker
ABA Oman International School, Sultanate of Oman

Abstract

The Middle Years Programme (MYP) is one of four programmes offered by the International Baccalaureate, together with the Diploma Programme, Career-related Programme and Primary Years Programme. This study investigated the difference in job satisfaction levels of MYP Coordinators based on the number of IB programmes delivered in the school. Schools offering the MYP are required to appoint a member of staff to the role of MYP Coordinator. MYP Coordinators differ by age, gender and experience, and work in diverse school environments. The purpose of this study was to explore the job satisfaction of the critical role of MYP Coordinator. Using Herzberg's Two Factor Theory as the theoretical framework, a modified version of the Job Satisfaction Survey was distributed to all registered Coordinators via email. 344 participants responded to eighteen items addressing the central question: What is the difference in job satisfaction levels of active MYP Coordinators based on demographic factors? The independent variables were age, gender, experience as a coordinator, number of IB programmes in school and eAssessment implementation. Using one-way ANOVA tests and t-tests, no statistical difference in job satisfaction was found for age, gender, experience as a Coordinator or the implementation of eAssessments. There was a difference in job satisfaction levels for MYP Coordinators working in 3-programme (MYP plus Diploma Programme and Primary Years Programme) schools compared with those in MYP-only schools, with the former recording higher job satisfaction levels. This finding demonstrates the need for whole-school alignment in the promotion of an atmosphere that is conducive to effective MYP coordination.

Keywords

Middle Years Programme, MYP, MYP Coordinator, International Baccalaureate, Job Satisfaction, Herzberg, Spector

Introduction

The International Baccalaureate (IB) Middle Years Programme (MYP) is under-researched compared to the IB Diploma Programme (DP) and Primary Years Programme (PYP) (Dickson et al, 2018; Gibb, 2014). These three programmes, along with the newer Career-related Programme

Corresponding author:
Megel Ricardo Barker, ABA Oman International School, Sultanate of Oman
Email: embark30@gmail.com

(CP), constitute the IB suite of curriculum frameworks that support IB World Schools (the term used to describe any school that offers one or more of the IB programmes). This study investigated IB World Schools that are also international schools that fit the definition used by ISC Research of schools that offer an internationally-recognized curriculum framework and deliver learning through the medium of English. Specifically, the focus of this study was to investigate the difference in job satisfaction levels of MYP Coordinators (those with responsibility for leading the MYP) in IB World Schools according to the number of IB programmes delivered in the school.

International Schooling

According to ISC Research, a leading market research company, the number of students enrolled in international schools globally, increased rapidly from 969,000 in 2000 to over 5.65 million in under 20 years. By 2019 there were over 11,000 schools that self–identify as international, employing more than 500,000 teachers worldwide (ISC Research, 2019; PIE News, 2019). In 2019, ISC Research reported that over US $50 billion had been collected in fees in this industry annually to date (ISC Research, 2019). With countries including China and the United Arab Emirates largely responsible for the upward trend in the burgeoning number of international schools worldwide (PIE News, 2019; Machin, 2017), this positive growth trend shows little signs of abating in the near future, with Machin (2017) likening the international education field to the 19th century California gold rush.

The speed at which the international school sector is changing inhibits the ability to form a clear definition of what actually constitutes an international school (Brummitt & Keeling, 2013; Bunnell, Fertig & James, 2016; Hayden 2011; Hayden & Thompson, 2008; Machin, 2019). For that reason, the field of international education carries a certain mystique leading to an increasingly diverse educational space (Hayden & Thompson, 2008; Mancuso, Roberts, & White, 2010) not restricted to geographical location. Yet these definitions fail to capture the breadth of schools that identify themselves as international (ISC Research, 2019; Walker, 2015). Hence, there is broad agreement among current international education researchers that finding a single, all-encompassing definition for international schools agreed by all stakeholders in the field is doubtful (Bunnell, Fertig & James, 2016; Hayden & Thompson, 2008; Walker, 2015).

The International Baccalaureate

The International Baccalaureate, formed in 1968, has emerged as one of the leading providers of curricula to meet the international demand alongside the traditional British and American schools' curriculum (Gibb, 2014; IB, 2020c; ISC Research, 2019; Miller & Harrison, 2017). The IB claims over 4,500 IB schools in 135 countries offering one of its four recognized IB programmes (IB, 2020c), each covering a specific age range.

The IB requires that every school offering one of its programmes formally appoints a member of its pedagogical team to be the programme coordinator (Gibb, 2014; Hayden & Thompson, 2011; IB, 2014; IB, 2020a; Robertson, 2011). Communications from the IB regarding programme implementation, professional development and assessment are directly conveyed to the programme coordinators, who are then tasked with disseminating this information to the wider school community (IB, 2014; IB, 2020b). In the most recent publication of the IB's Programme Standards and Practice, a publication offering guidance to IB teachers and coordinators, the role of coordinator is described under the heading of Leadership. The document clearly outlines the requirement that the coordinator is IB-trained, has 'a job description, release time, necessary support, and an organizational position to facilitate curriculum and programme development' (IB, 2020: 6). While the role

of IB Coordinator is a required function for each programme offered by an IB World School, the publication refrains from specifying a job description. The final decision on the scope of the role remains within the province of individual schools, based among other factors on school size, location, and school philosophy.

The role of the MYP Coordinator, the specific focus of this article, requires clarity (Robertson, 2011) as it is not clearly defined in IB published documents and nor is it usually published in schools' job descriptions. This can invariably lead to Coordinators experiencing challenges that may affect their motivation and by extension their productivity (Gibb, 2014; Robertson, 2011). Robertson's (2011) study appears still to be the only independent study specifically to address the work-life of MYP Coordinators. Subsequently, IB-commissioned papers have been published that focus on IB middle leadership and the challenges experienced (Bryant et al, 2019; Dickson et al, 2018; Gibb, 2016). Researchers have noted that the MYP appears under-researched (Dickson et al, 2018; Gibb, 2014; Robertson, 2011) despite being implemented in over 1,400 IB schools (IB, 2020c). There is clearly a need for more research to match the growth of IB schools that offer the MYP to their students, especially if such research brings greater understanding to IB World Schools of the role of MYP Coordinators.

Job Satisfaction

Job satisfaction is a complex phenomenon that has been the source of numerous research papers (see, for instance, Herzberg, 1959; Locke, 1976; McGregor, 1960; Porter & Lawler, 1968; Vroom, 1964). As behavioral theorists link job satisfaction to motivation, and consequently to productivity, it is desirable for leaders to have an understanding of this construct (Herzberg, 1966; Herzberg et al, 1959; Maslow, 1943; Taylor, 1911; Locke, 1976). While researchers have tended to simplify the concepts of job satisfaction and job dissatisfaction as opposite extremes of a continuum of employee satisfaction (Locke, 1976; Maslow, 1943; Taylor, 1911), Herzberg (1966) offered an alternative perspective, considering it as too unidimensional for such a complex phenomenon. Herzberg instead advocated the Two-Factor Theory of motivation which proposed that sources of job satisfaction and dissatisfaction are different and distinct. It is through the sense that job satisfaction is separate from job dissatisfaction that the role of MYP Coordinators has been researched here.

Methodology

Theoretical Framework

The Two-Factor Theory of Motivation (Herzberg et al, 1959) is sometimes referred to as the Motivation-Hygiene theory. The theory differentiates between the factors that impact a person's experience of job satisfaction (motivation), considering these factors to be distinct from the factors that impact a person's job dissatisfaction (hygiene). This theory provides a theoretical lens to better understand how mid-level leaders experience their work on a daily basis (Alfayad & Mohd Arif, 2017; Escardíbul & Afcha, 2017). Motivational theorists (Herzberg, 1966; Locke, 1976; Maslow, 1943) connect employees' overall effectiveness with levels of job satisfaction. The feelings of job satisfaction and job dissatisfaction are considered as separate emotional perceptions allowing the researcher to understand if the context or the content of the job is a factor. The Job Satisfaction Survey devised by Spector & Wimalasiri (1986) is based on nine facets of four questions, each facet closely aligned with Herzberg's theory (Spector, 1994; Spector & Wimalasiri, 1986). Of the nine facets, three are aligned with Herzberg's factor classification for job satisfaction, namely contingent rewards, promotion, and nature of work (Spector, 1994). With regard to job dissatisfaction,

five of the facets are closely related, namely pay, fringe benefits, supervision, operating proce-dures, and co-workers (Spector, 1986; 1994).

As Herzberg's two-factor theory (1966) was the theoretical framework for this study, it was imperative that the chosen instrument had theoretical congruence with the definitional boundaries of job satisfaction. For that reason, the three facets of Spector's Job Satisfaction Survey (Spector, 1985) that aligned with the definition of job satisfaction according to Herzberg were extracted from the nine-facet survey to form the instrument that formed the basis of the current study. The selected facets were promotion, nature of work and contingent rewards (Herzberg, 1966; Spector, 1985; 1994).

Herzberg's theory has been tested in numerous studies that examine job satisfaction of human service professionals and leaders (Alfayad & Mohd Arif, 2017; Escardíbul & Afcha 2017; Herzberg, 1965; McNeil, 2016; Rainey, 2016) but has not yet been applied with MYP Coordinators. With researchers expressing caution about unconditional sameness with Herzberg's original paper and its factor dichotomy, applying the theory in different contexts is worthwhile research (Armstrong, 1971; Brown, 2005; Wanous, 1974).

Purpose and Research Question

The purpose of this quantitative, non-experimental study was to examine differences between the number of IB programmes delivered (independent variables) and the scores obtained on the modi-fied Job Satisfaction Survey (dependent variable). The number of IB programmes in school ranged from 1 to 4, and schools that did not offer the MYP through the medium of English were not included in the study. The target population, current MYP Coordinators, were invited to complete two sections of an online survey, the data from which were then analyzed.

The specific research question guiding the study was: What is the difference in job satisfaction level of MYP Coordinators based on the number of IB programmes delivered in their school? This research question led to the formulation of the hypothesis that was investigated in the study.

Assumptions, Limitations and Delimitations

The assumptions in this study included that the survey was completed by active MYP Coordinators who responded honestly and accurately, and that the items on the survey were understood. Limitations of the study related to the factors over which the researcher was incapable of exercis-ing full control while conducting the investigation: the mental state of the participants, the survey being completed in one sitting, the responses representing a general feeling rather than a response to a specific incident, the dominance of any type of school in the research sample, and being known personally to the target population. The delimitations of the study include that only IB MYP schools that deliver the programme in English were included in the study, that job satisfaction is considered as a separate construct from job dissatisfaction, and the use of only three facets (contingent rewards, promotion and nature of work) from Spector's job satisfaction survey.

Data Analysis

The data collection process required participants to complete a two-part online survey. Section A of the survey consisted of selected items from the Job Satisfaction Survey (Spector, 1994), creating a 12-item instrument that measured three facets of job satisfaction (contingent rewards, promotion and nature of work), on a 6-point Likert scale ranging from strongly agree (Score = 6) to strongly disagree (Score = 1). The study fully adhered to the scoring instructions provided with the original

Table 1. Configuration of IB Programmes and the Respective Group Assignments.

Configuration	Group	Number of IB Programmes
MYP only	A	1
MYP + DP	B	2
MYP + PYP	C	2
MYP + CP	D	2
MYP + DP + PYP	E	3
MYP + PYP + CP	F	3
MYP + DP + CP	G	3
MYP + DP + PYP + CP	H	4

survey. Each statement had either a positive or negative direction in relation to the three facets deployed in the study. Negatively oriented response items were then reverse scored to ensure consistency and alignment with all responses. Therefore, when a respondent expressed strong agreement with a negatively worded statement, the score awarded for this response would be a 1; this was scored as equivalent to a strong disagreement to a positively worded item. Given the method of scoring the participants' responses, the overall job satisfaction scores ranged from 12 to 72. While Spector (1994) did not provide a waterline to determine whether specific overall scores represented job satisfaction or otherwise (Spector, 1994) he did suggest that high scores on the survey were associated with better feelings of job satisfaction. Section B of the survey collected both demographic and school-related data, providing the basis for the independent groupings for analysis. In this study the school-related factor that was analyzed was the number of IB programmes offered by a school.

Participants were contacted using the email addresses for MYP Coordinators published on the IB website (IB, 2019). Each participant received an introductory email that provided details about data protection, the purpose of the study and how their data would be used in the study. The introductory email provided essential guidance to participants in completing the survey.

Number of IB Programmes in School

Schools may apply to the IB for authorisation to implement either a single programme or multiple programmes in whichever combination is appropriate for their school community. Given that the IB offers four curriculum programmes, and any combination is possible between them, there was a need to introduce a new classification to aid the preparation of the data. Additionally, as the study was focused only on the role of the MYP Coordinator, the distinctions used in this study were related specifically to the presence of MYP in the school's educational offering. The following groupings therefore are only those that include the MYP.

Groups

The nomenclature 'Group' was introduced in this study to distinguish between different configurations of IB programme offerings. Group A were schools that delivered only the MYP, Group B represented the schools that delivered only the MYP and DP, and so on. Table 1 shows the configurations.

For the purposes of the study, schools were grouped according to number of programmes offered. For example, Groups B, C and D were treated as being the same type of school configuration for the initial analysis since they all delivered two programmes.

Sample

The online survey was completed by 344 respondents, having been delivered to the email addresses available on the IB website for all 1424 MYP Coordinators in IB World Schools then recorded as delivering the programme in English (IB, 2020). Of the emails sent, 308 were returned as undelivered with automated computer messages ranging from security protocols to spam autoblocking. Given that the survey was therefore delivered to 1116 inboxes, the response rate was approximately 30.8%. Of the 344 respondents, 341 were accepted as complete and suitable to be included in the data analysis and testing of the hypotheses guiding this study. None of the questions in the survey were mandatory, which meant that respondents could choose either to share information they wished to divulge or to leave the question unanswered. Three respondents were not included in the data set exported to SPSS V.23 for further analysis: one respondent had inconsistent responses, one did not respond to any of the items on the survey, and one responded only to one item. Given the very small number of responses removed from the sample, it was concluded that the effect on the analysis would be negligible. The 341 respondents whose data were exported for further analysis are referred to as the participants in this study.

Responses by Participant Category

Apart from the number of IB programmes delivered in their school, participants were also asked to provide their age, gender, experience as a Coordinator and location. Given the sensitivity of these data, some participants did not divulge all of this information in their submitted response. For example, only 266 respondents shared the location of their school. Data provided were as follows:

Age: The age of the participants (M = 43.9 years, SD = 8.81 years) ranged from 18 to 76 years with four participants (1.2%) not providing a response to this question. The vast majority of the participants were within the age ranges 36–45 (n = 138) and 46–55 (n = 101). The grouping 'below 35 years' recorded the highest level of job satisfaction.

Gender: There were more female participants (n = 240) than male participants (n = 100). In the modified Job Satisfaction Survey (Spector, 1994), males recorded a marginally higher level of job satisfaction (M = 51.49, SD = 10.13) than females (M = 49.77, SD 9.72) as observed in their mean scores. One participant did not provide a response to the gender question.

Experience as a Coordinator: The experience level of the participants ranged from 1 to 19 years (M = 4.7, SD = 3.51), with all participants providing a response to this item. The distribution of participants' experience was categorized to create three distinct groups for further analysis. In the instructions to participants, they were directed to collate all their years of experience as a Coordinator even if gained in different schools. The distribution of experience as a Coordinator was fairly balanced, with the grouping 'between 3–5 years' (n = 122) having the largest number of participants. The other two groupings 'less than 3 years' (n = 109) and 'more than 5 years' (n = 108), both had higher levels of job satisfaction recorded on the survey than did MYP Coordinators with 3 to 5 years' experience in the role.

IB Region: Of the 341 participants in the study, 266 respondents indicated the IB region in which their schools were located. IB schools are grouped according to three regions across the globe: IB Asia Pacific (IBAP), IB Africa Europe Middle East (IBAEM), and IB Americas. The

Table 2. Job Satisfaction Scores based on number of IB programmes offered in Schools.

Number of Programmes	Mean Job Satisfaction	Standard Deviation	Number of Schools
1	48.91	10.25	105
2	49.45	9.54	101
3	52.27	10.44	128
4	48.24	9.88	7

IBAP region covers schools in Asia and countries by and near the Pacific Ocean, the IB Americas region includes North and South America, Central America and islands in the Caribbean Sea. While IB Americas had the largest number of participants in this study (n = 148) and the largest number of IB MYP authorized schools (n = 845), this was a lower level of participation compared to the IBAEM region which had 315 schools and 75 participants. Participants overall were from 63 countries, with 24% of IBAEM schools included in the study compared to 16% and 18% respectively from IBAP and IB Americas.

Results

Table 2 shows the job satisfaction mean scores on the survey by number of programmes offered.

A one-way ANOVA test was conducted to determine if there was a statistically significant difference in the mean job satisfaction scores of MYP Coordinators according to number of programmes offered in schools. The one-way ANOVA was statistically significant: $F(3, 337) = 2.753$, $p = .043$. The strength of the relationship between the number of IB programmes and job satisfaction scores for MYP Coordinators as assessed by eta squared was 2.4% of the variance of the dependent variable. Follow-up tests were conducted to evaluate pairwise differences among the means. The Tukey post-hoc test was implemented with variances assumed equal due to a non-significant Levene's test for Homogeneity of Variances $F(3, 337) = .102$, $p = .959$. There was a statistically significant difference between MYP Coordinators working in schools with 3 IB programmes inclusive of the MYP and schools with the MYP only, with the latter having lower mean job satisfaction scores than the former.

Given that three groups (E, F and G) included different combinations of three IB programmes, a further one-way ANOVA test was conducted to determine if any particular group within the three–school configuration had significantly higher job satisfaction scores compared with MYP-only schools (Group A). Table 3 shows the reconstituted table with only Group A schools and Groups E, F and G schools. Group F schools were removed from the analysis due to having insufficient data for analysis.

A one-way ANOVA test was conducted to determine if a statistically significant difference existed between these configurations. The test was statistically significant: $F(2, 338) = 4.163$, $p = .016$. The Tukey post-hoc test was implemented with variances assumed equal due to a non-significant Levene's test for Homogeneity of Variances $F(2, 338) = .126$, $p = .882$. There was a statistically significant difference observed between Group A schools and Group E schools.

Implications and Recommendations

The goal of this study was to address the lack of research on MYP Coordinators in IB schools worldwide that deliver the programme in English by examining if there was a difference in levels of job satisfaction according to number of IB programmes being delivered in the school.

Table 3. Distribution of Schools with 1 and 3 IB programmes.

Group	Mean Job Satisfaction Scores	Standard Deviation	Number of Schools
A	48.91	10.25	105
E	52.51	9.70	109
F	NA	NA	1
G	50.61	9.43	18

Using Herzberg's Two-Factor theory as the theoretical framework, responses to an online survey by active MYP Coordinators were analysed to determine if any meaningful difference existed in job satisfaction levels. The findings have significance as an extension of the corpus of research on IB World Schools, and in particular contribute to the limited research relating to MYP Coordinators.

Accordingly, this study extends the present body of research available in relation to MYP Coordinators and MYP coordination by exploring issues that may guide future research. The grouping of schools based on the number of IB programmes offered, inclusive of MYP, may aid further inquiries by providing a consistent terminology for future reference by researchers. Additionally, this grouping may initiate a discussion within the IB on how to support different schools based on their grouping. Although the scope of the research did not extend to investigating issues qualitatively, simply by offering a potential lens to observe and investigate IB MYP schools this study has contributed to the broader field of educational research.

One significant finding of this study, based on the statistically significant differences in mean job satisfaction scores, suggests that MYP Coordinators in Group E schools were more motivated than MYP Coordinators in Group A schools and other configurations. This finding suggests that school leaders might consider implementing the MYP with a long-term strategy also to implement the DP and PYP. The findings possibly point to real deficit in job satisfaction for Group A schools when compared with Group E Coordinators, but without location and an understanding of other factors, a clear claim cannot be made. Robertson (2011) described the role of the MYP Coordinator as being a guide and an orchestrator, which suggests that MYP Coordinators with lower motivation than others may find this collaborative function challenging.

Whole school alignment is critical to supporting MYP implementation (Azzam et al, 2019). The importance of calibrating school systems to facilitate frictionless MYP integration was a critical finding from a study of 2,500 MYP teachers in 18 schools commissioned by the IB (Azzam et al, 2019). This study also highlighted the MYP Coordinator as being the critical person in successful MYP schools. Group E schools, with their three IB programmes, seemingly facilitated an atmosphere that was supportive of MYP implementation. On the other hand, with only one programme, whole school alignment may cause friction between accountability processes and the programme's philosophy.

Group E schools provide a rich environment for whole school collaborative practices, embedding of the IB philosophy, and the development of professional learning communities. Hence, it is not unlikely that Coordinators implementing the MYP in Group E schools would experience higher levels of job satisfaction compared to MYP Coordinators implementing in Group A schools.

All survey information was self-reported by participants, and the modified Job Satisfaction Survey (Spector, 1986; 1994), along with the demographic questions, was assumed to be completed in one sitting and by active MYP Coordinators. With the USA contributing a large

proportion of the participants relative to other countries, and many MYP Coordinators working in single-programme IB MYP schools (IB, 2020c), the effect of these factors may suggest an opportunity for further research. Given the nature of MYP implementation in US schools and other national systems, there may be other factors affecting job satisfaction that were not explored in this study. Hence, future research may consider exploring the US system on its own as well as inquiring into sources of job satisfaction different from those investigated in this study.

Possible Further Research

Throughout the discussion of these findings, a number of potential avenues for further exploration have been noted. Future researchers of the MYP and job satisfaction may wish to consider the following suggestions for further inquiry.

1. The findings suggest that there may be a specific culture apparent in schools that implement the MYP together with the DP and PYP. Future qualitative researchers may wish to investigate the culture in these environments.
2. The role of MYP Coordinators varies from school to school and country to country. Even school sizes can have an impact on the job satisfaction and experience of the Coordinator. Given the diversity of experiences, it may be interesting to explore the experiences of MYP Coordinators in Group E or Group A schools.
3. As the data were being analysed it was apparent that the interplay between age and gender may reveal important information about MYP Coordinators' job satisfaction, though it was not within the scope of this study. Interested researchers may wish to consider the interaction between these variables to see if relationships exist related to their combined effects.

Conclusion

The purpose of this study was to examine the difference in job satisfaction of MYP Coordinators based in different contexts and, by doing so, simultaneously to contribute literature to the sparse library of research on MYP coordination. The lack of research on MYP Coordinators motivated the planning and development of this study. Of significance is the finding that MYP Coordinators in IB schools that deliver the Diploma Programme and the Primary Years Programme along with the MYP recorded higher job satisfaction scores than did MYP Coordinators based in other contexts. As noted earlier, school leaders and administrators may utilize this information in a strategic manner, since how they support MYP Coordinators may be informed by the findings of this study. Azzam et al (2019) recommended that schools should continue to seek opportunities to facilitate the pedagogical leadership role of the MYP Coordinator. As schools consider policies, alignment and practices as well as support for, and recruitment and retention of, MYP Coordinators, the findings in this study point to conditions that may offer support in leading to more successful MYP implementation. In recognising that the quality of student learning may be linked to motivation levels of MYP Coordinators, the extent to which the MYP is robustly integrated into the school context may well be an important factor for consideration by school leaders and administrators.

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Author biography

Megel R Barker is a former MYP Coordinator who now serves as Middle School Principal at ABA Oman International School, Sultanate of Oman.