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PARENTS' CHALLENGES AND THEIR CHILD'S ACADEMIC PERFORMANCE IN SCIENCE IN THE MODULAR DISTANCE LEARNING

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Abstract:
This study investigates parents' challenges and their child's academic performance in science in modular distance learning. It also tests the significant difference between parents' challenges to their profile variables and their child's academic performance. In this descriptive-survey research design, data were gathered from 318 parents of secondary students in public secondary schools situated on the island using convenience sampling. Gathered data were systematically treated and analyzed using frequency, percentage count, mean, standard deviation, one-way analysis of variance (ANOVA), and Pearson-r correlation. Findings revealed that individual-related challenges such as finances, supervision of child's studies, and poor teaching skills were the most significant challenges parents experienced in implementing modular learning. Parents disagreed that instructional and institutional challenges affect them in modular distance learning. The respondents' children performed satisfactorily in science during the first and second quarters of the school year. There was a moderately significant relationship between individual-related and instructional-related challenges. However, a weak significant relationship is surfaced between parents' institutional-related challenges and their child's

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academic performance. No significant difference was observed regarding individual-related, instructional-related, and institutional-related challenges when grouped according to their profile variables. The study concluded that modular distance learning contributed fairly and minimally to students' science performance brought about by continued social and academic adjustment. School and parents' involvement in implementing modular learning is essential for improving the modality.

Keywords: academic performance, distance education, modular learning, new normal, parent's challenges

1. Introduction

The temporary closure of schools has affected more than 1.2 billion learners worldwide and more than 28 million in the Philippines (UNESCO, 2021), wherein face-to-face instructional activities were temporarily closed (Wajdi et al., 2020). Modular distance learning is one of the learning delivery modalities implemented in the Philippines in the new normal education (DepEd, 2020) where teachers developed learning modules (Ramadhan et al., 2020; Auditor & Mutya, 2022). However, this learning modality posed different challenges, risks, and problems to the students and teachers (Bao, 2022; Geverola et al., 2022). The Department of Education (DepEd) emphasizes the vital role of parents and guardians in ensuring that their children's learning will continue. The support and cooperation coming from the parents will be critical to the success of the entire education system (Hernando-Malipot, 2020).

Parental engagement is the level of involvement in their children's education (Goodall & Montgomery, 2014; Jeynes, 2018; Yamamoto et al., 2016). Parents are one of the education stakeholders (Janmaat et al., 2016). Parents may hesitate to get involved in their children's education, even if some schools encourage it (Bartolome et al., 2017). Parents' role in accompanying children's success during home study becomes very central, in line with that World Health Organization (2020) released various guidelines for parents in attending to their children during this pandemic, including parenting tips to be more positive and conducive in accompanying children during their activities at home. According to Rahmadani et al. (2021), it is not just the obligation of educational institutions to implement education; parents and the local community also have a role in this regard. The role of parents' cognitions in shaping socialization practices and children's developmental outcomes is of universal significance (Alampay & Jocson, 2011). The criticality of education problems during the pandemic is seen when parents become teachers at home with various parental backgrounds; this happens in all regions of the world (Saleh et al., 2021). It has also given a challenging routine to parents taking responsibility for their children's learning process (Coyne & Cowley, 2007; Garbe et al., 2020; Parczewska, 2021). Moreover, embracing the new normal in education could mean doubling the effort exerted by the stakeholders, especially the parents, who play a crucial part in implementing modular distance learning. Thus, this study aims to investigate

parents' challenges and the implementation of modular distance learning. This will help our stakeholders in education to see how these challenges could affect the students as recipients of education in this new modality, especially in terms of their academic performance.

2. Literature Review

School closures left everyone unprepared and uncertain about when the schools reopen in the middle of a health crisis (Viner et al., 2020). The shift of the educational system from the conventional way of learning where the child freely learns and interacts in a natural classroom setting evolved to the new normal way of learning known as distance learning. In this scenario, the burden brought by this catastrophe greatly affected the parents, especially the girls. Montoya (2020) elaborates on the importance of the role of parents being the first teacher and the home as the first place where learning takes place. Parents took a vital role in the learning continuity plan (Cahapay, 2021).

Bhamani et al. (2020) specified that parents have had to take care of homework more than ever, including explaining worksheets and other tasks. Moreover, students attending online classes who are afraid and shy to ask questions or lagging internet connections lead all queries diverted to parents, some of whom have their work to complete at home. Parents faced individual-related challenges, specifically in managing their time between work and study schedule, ability to handle child misbehavior, and financial difficulties encountered in implementing modular distance learning. This can be a daunting experience, especially for working parents who have minimal parenting skills or may have barely encountered a situation of having to child-mind a kid or supervise their school homework (Cluver et al., 2020; Owusu-Fordjour et al., 2020)

Zainuddin et al. (2020) implied that parents had been weighed down daily with impossible demands as they grapple with running a household parallel to juggling with home-based teaching activities that would see their kids through the day. Instructional-related and institutional-related challenges parents face in implementing modular distance learning, specifically on the communication of parents, teachers, and learners, which is vital to today's new normal education setting. Trovela (2021) revealed that challenges such as time management, limited knowledge of the parents on the topics in the modules, and independence in learning are the common challenges parents face in implementing modular distance learning.

Parents realized how important school and teachers are after they have been experiencing home-based teaching and learning. Parents and children live with increased stress, media hype, and fear, which challenges their capacity for tolerance and long-term thinking (Cluver et al., 2020). The economic crisis has added since many have lost their jobs, adding to parental problems in providing the necessities for their child. Moreover, many parents are afraid of the possible adverse effects of distance learning since numerous children think of it as a vacation from school; hence they want nothing to do with their school-like routine (Bhamani et al., 2020).

On a positive note, home confinement and home learning could increase the bond between parents and children as they spend more time together. Parents have the potential to help their children learn and grow through natural daily interactions and activities (Cluver et al.,2020). On the other hand, Bhamani et al. (2020) stated that some parents have used this opportunity to try out new things and ideas with their kids to become creative and do something they have not done before. Llamas and Tuazon (2016) revealed that child's academic performance improves upon seeing their parent's involvement in education. Hence, parents' participation in school motivates their children to perform academically better.

The reviewed literature and studies had a resemblance with the current research conducted, for it amplifies the role of parents in modular distance learning and the challenges they experienced in helping and assisting their child to learn despite the physical absence of the teacher. It elaborates on factors such as individual-related challenges, instructional-related challenges, and institutional-related challenges. It investigated the possible effects of these challenges on their child's performance. The present study focuses only on the parents in remote areas like those living in an island barangay.

3. Material and Methods

This study used a descriptive-survey research design to investigate parents' challenges on the implementation of modular distance learning and the relationship of these challenges to the academic performance of their child. Furthermore, it also tests the significant difference between the parents' demographic challenges to their profile variables and their child's academic performance.

The respondents were the parents of the secondary students in public secondary schools in Surigao City, Philippines using the convenience sampling technique. Out of 343 total populations, 318 parents responded to the survey. The focus of the study was the schools located on an island where access to the internet and brownouts are common problems. Students enrolled in island schools came from different feeder barangays, which are far from the school's location. The parents of the enrolled students in the school included answered the given survey questionnaire.

The researcher utilized a 4-point Likert a modified survey questionnaire anchored on the study of Zainuddin et al. (2020) to fit the need of the locale and translate it to the mother tongue (*Sinurigaonon*) for a better understanding of the parents who are the respondents of this study. The questionnaire consists of three parts: Part A-the parents' profile; Part B- parents' challenges in the implementation of modular distance learning as to individual-related challenges, instructional-related challenges, and institutional-related challenges; and Part C-student's academic performance for the first and second quarters of the school year.

The questionnaire was validated by a panel of experts composed of the master teacher, principal, and education program specialists in English and Research for the

construct and criterion validity of the questionnaire and to avoid further problems and biases in the result**.** Furthermore, Cronbach's Alpha was used to test the reliability of the modified questionnaire. The individual-related challenges and instructional got the highest alpha of 0.91, which is interpreted as "excellent". Instructional-related and institutional-related challenges got 0.83 and 0.81, respectively, which is interpreted as "good". This value was considered acceptable to achieve the purpose of the current study (Al-Kellani & Al-Shraifeen, 2011; Obiedat et al., 2016).

For data gathering procedure, a certificate from the Office of the Dean of Graduate Studies was secured before the conduct of the study in adherence to the safety and health protocol. Upon approval, an invitation and informed consent form was given to the participants indicating voluntary participation in the study and understanding all the rights of withdrawal and refusal. Strict confidentiality was assured to the participants, which was specified in the informed consent form.

Data gathered were systematically treated and analyzed using descriptive and inferential statistics to achieve a correct and reliable result. Frequency and Percentage count were used to determine the demographic profile of the respondents. Mean and standard deviation was utilized to determine how the parents' challenges affect their child's performance. One-way Analysis of Variance (ANOVA) was utilized to determine the significant difference in the perceived challenges of parents in the implementation of modular distance learning when grouped according to profile variables. Pearson r-correlation was used to determine the significant relationship between the challenges met by the parents on the implementation of modular distance learning and the students' academic performance.

4. Results and Discussion

4.1 Profile of the Respondents

A total of 318 parents participated in the study. Table 1 shows the descriptive statistics of the demographic characteristics of respondents in terms of sex, age, educational attainment, monthly income, number of children in school, and occupation. Most respondents were female (75%), and their age group mostly belonged from 36-45 years old (50%). Regarding educational attainment, most parents were high school level (31%) and high school graduates (29%).

As to the monthly income of the parents, almost 75% got an income of ₱5,000 and below. Consequently, only four or less than 2% of the respondents got an income range from 18,000-25,000. Most of the number of children in school ranges from 1-2, about 63% of the total response. The results also revealed the top 4 occupations of the respondents. The housewife leads on the list, followed by fisherman, barangay employees, and mining workers. Factory workers and laborers were among the least respondents, comprising almost 1% of the total population.

Table 1: Demographic Profile of the Respondents

Respondents' Profile	**Respondents**		
	Description	**F**	**%**
Sex	Male	80	25.16
	Female	238	74.84
Age	23-35	63	19.81
	36-45	158	49.69
	46-55	78	24.53
	56-65	13	4.09
	66 and above	6	1.89
Educational Attainment	Elementary level	35	11.01
	Elementary graduate	63	19.81
	High school level	99	31.13
	High school graduate	93	29.25
	College level	20	6.29
	College graduate	8	2.52
Monthly Income	₱5,000 and below	238	74.84
	₱5,001-₱10,000	67	21.07
	₱10,001-₱18,000	9	2.83
	₱18,001-₱25,000	4	1.26
Number of Children in School	1 to 2	199	62.58
	3 to 4	107	33.65
	5 to 6	10	3.14
	7 to 8	2	0.63
Occupation	Factory worker	2	0.63
	Teacher	4	1.26
	Mining	11	3.46
	Laborer	2	0.63
	Security guard	3	0.94
	Driver	8	2.52
	Businessman/Businesswoman	6	1.89
	Barangay Employee	14	4.40
	Construction worker	4	1.26
	Vendor	8	2.52
	Farmer	8	2.52
	Fisherman	91	28.62
	Housewife	157	49.37

4.2 Perceived Challenges of Parents in the Implementation of Modular Distance Learning

The test outputs of the research participants were evaluated and measured using the parameter of the study to interpret the result of the perceived challenges of parents in the implementation of modular distance learning in terms of individual-related, instructional-related, and institutional-related challenges presented in Table 2-4.

Extracted from the survey of the parents, it was revealed in Table 2 that individual-related challenges were predominantly rated as "Agree". Ultimately, nine of ten indicators were perceived as "Agree" by the parents. Indicator 3, "I feel financial

difficulties", got the highest mean (2.93±0.88). This signifies that being financially unstable is the greatest challenge commonly encountered by parents. Meanwhile, indicator 5, "the home learning environment is unfavorable for me to become effective in assisting my child to learn", obtained the lowest mean (2.49±0.98) and was described as "Disagree". This would suggest that the parents are just convenient assisting their children's learning at home. The composite mean of 2.73, equivalently perceived as "Agree" indicates that the respondents observed such individual-related challenges in the implementation of modular distance learning. This entails those parents who are personally struggling in adapting to their new normal roles in assisting their child.

The study of Garcia (2018) claimed that having access to learning resources like books and other references, coupled with parental involvement, tends to increase parents' drive to provide their children right information and support them in their studies. However, being financially unstable or financially deficient as faced by parents hinders them from accessing learning resources that could help their child's learning improve. Thus, economic hardship experienced by families has a great impact on the ability of the parents to support the education of their child (Cheng et al., 2021; Sahithya et al., 2020)

In addition, Guan and Benavides (2021) said that learners encountered problems regarding collaboration with their parents. They said that their parents are busy with work and have no time to assist in their module. Also, some of the parents lack knowledge on the topic, and they cannot facilitate instruction. Anzaldo (2021) revealed that some parents have a hard time teaching their children at home. This suggests that the economic status of a family could be one of the biggest reasons why parents would not be able to give full support to a student's education.

Table 2: Individual-related Challenges Perceived by Parents

Individual-Related Challenges	**Mean SD**	***Interpretation**
1. I lack sufficient time to supervise my children's studies.	2.86 ±0.85	Agree
2. Difficulty in handling child misbehavior.	2.54 ±0.95	Agree
3. I feel financial difficulties.	2.93 ±0.88	Agree
4. I lack the support from other family members.	2.56 ±0.92	Agree
5. The home learning environment is unfavorable for me to become effective in assisting my child to learn.	2.49 ±0.98	Disagree
6. I cannot comprehend and speak well the medium used in some subjects which is English.	2.82 ±0.89	Agree
7. I lack experience and/or training with instructional technologies.	2.80 ±0.91	Agree
8. Conflicts between family, work, and study schedule.	2.79 ±0.87	Agree
9. I lack background knowledge on the subject.	2.69 ±0.89	Agree
10. I have poor teaching skills which lead children to further confusion.	2.83 ±0.80	Agree
Composite Mean	**2.73 ±0.54**	**Agree**

***Legend:** 01.00 – 01.75 Strongly Disagree, 01.76 – 02.50, 02.51 – 03.25 Agree, 03.26 – 04.00 Strongly Agree

In the context of instructional-related challenges, it can be gleaned in Table 3 that out of 10 indicators, indicators 1 and 4 are the only indicators that got an equivalent "Agree" description. However, indicator 4, "science material contents are too lengthy and have a

wide scope," got the highest mean (2.53±0.86). This suggests that parents find it challenging to have science printed material content too lengthy and comprehensive in scope.

The study of Olivo (2021) claimed that parents found the time allotment to finish activities in the modules insufficient because there were so many activities found in the learning modules. Consequently, parents find it a problem because they must spend a long time before they can finish one module. For a parent having only one student to assist, it could be less challenging on their part. However, working parents with limited time to oversee the child's progress in their home-schooling is such a headache for them. In addition, indicator 8, "Poor quality of Science printed-visual materials," got the lowest mean (2.23±0.91) which is described as "Disagree." This implies that the quality of science printed-visual materials is "Good." This means that the font size and text used are readable and simple, which could not give the reader a headache in the long term. The color and design also are appropriate and appealing to the reader's eyes.

The overall mean of 2.40 is equivalently described as "Disagree", which denotes that the respondents generally have not observed any challenges related to instruction in implementing modular distance learning. In this way, instructional-related challenges pose no problem to the parents, thereby, teachers are efficient, and their instructions are executed.

Olivo (2021) revealed that the distribution and retrieval of modules posed no problem. It is well-organized every time distribution comes since their parents are Purok leaders, who also brought the learning modules to their homes. In addition, Miguel et al. (2021) pointed out that teachers' task in modular distance learning does not only focus on teaching students; in fact, they are designing some strategies to update and involve parents to be active partners in monitoring their children at home. Moreover, teachers experienced challenges in teaching during the pandemic, such as adversity in distributing modules on time, erroneous modules, loss of interest among students, and resistant parents as a support to their child's education due to educational background and need to earn a living (Chan et al., 2021).

Table 3: Instructional-related Challenges Perceived by Parents

Instructional-Related Challenges	**Mean SD**	**Interpretation**
1. Delayed feedback on students' output from the subject teacher of science.	2.51 ±0.86	Agree
2. Lack of science teachers' contact and inadequate academic support.	2.48 ±0.87	Disagree
3. Delayed delivery of study materials from the school to the children's residence.	2.35 ±0.87	Disagree
4. Science material contents are too lengthy and have a wide scope.	2.53 ±0.86	Agree
5. Poor science course material design/ inappropriate learning materials to the learners' age and grade levels.	2.27 ±0.95	Disagree
6. Distributed printed modules in science are incomplete and are not in order.	2.29 ±0.93	Disagree

7. Unavailability of Science materials needed to perform the activities in a localized area.	2.49 ±0.84	Disagree
8. Poor quality of science printed-visual materials.	2.23 ±0.91	Disagree
9. The content of the activities is an inappropriate activity for each grade level.	2.40 ±0.84	Disagree
10. Lack of proper orientation to the parents on the implementation of Modular Distance Learning from the instructor.	2.43 ±0.92	Disagree
Composite Mean	**2.40 ±0.53**	**Disagree**

***Legend:** 01.00 – 01.75 Strongly Disagree, 01.76 – 02.50, 02.51 – 03.25 Agree, 03.26 – 04.00 Strongly Agree

In terms of institutional-related challenges, Table 4 revealed that only indicator 9, "the school is far from the children's residence" with a mean of 2.72, acquired an equivalent description of "Agree" out of 10 indicators. This claims that the residence being far from school is one of the challenges they experienced in modular distance learning. On the other side, the remaining nine indicators that gained an equivalent description disagree, indicator 1, "Poor parent-teacher relationship," and indicator 3, "School plan is not consulted and is "not agreed" by the parents before implementation" garnered the least mean of 2.17. This explains that the parent-teacher relationship is excellent and that parents are well-aware of any activities or plans the school implements.

Lastly, the composite means of 2.32, described as "Disagree," conveys those respondents do not find institutional-related challenges a problem in implementing modular distance learning. This indicates that schools posed no challenge or concern to the parents because parent-teacher collaboration in distributing and retrieving modular distance learning and online communication is well established. Guan and Benavides (2021) revealed that parents had no difficulty communicating with the teacher online because they are kind and easy to deal with through call or chat or call via cellphone. Students with an internet connection could directly ask queries to their teachers because they have class group chats where questions and clarifications were raised well.

Table 4: Institutional-related Challenges Perceived by Parents

Institutional-Related Challenges	**Mean SD**	**Interpretation**
1. Poor parent-teacher relationship.	2.17 ±0.98	Disagree
2. Non-uniform sources of printed materials distributed.	2.19 ±0.79	Disagree
3. School plan is not consulted and is not agreed upon by the parents before implementation.	2.17 ±0.89	Disagree
4. Class schedules given to the parents in answering the modules were not religiously followed and implemented by the teachers.	2.38 ±0.88	Disagree
5. Lack of workshops and other assistance provided by the school on teaching-related skills to the parents.	2.41 ±0.84	Disagree
6. Delay of vital information from the school to the parents.	2.33 ±0.87	Disagree
7. Poor communication relationship among stakeholders.	2.32 ±0.88	Disagree
8. No module is available	2.18 ±0.95	Disagree
9. The school is far from the children's residence.	2.72 ±0.98	Agree
10. Delayed production and distribution of learning modules.	2.29 ±0.93	Disagree
Composite Mean	**2.32 ±0.56**	**Disagree**

***Legend:** 01.00 – 01.75 Strongly Disagree, 01.76 – 02.50, 02.51 – 03.25, Agree, 03.26 – 04.00 Strongly Agree

4.3 Academic Performance of the Students in Science

Students' grades in science for the first and second quarters were obtained from their respective teachers to identify if their performance is increasing or decreasing in implementing modular distance learning. Table 5 presents their academic performance. Students perform satisfactorily in the first and second quarters of the current academic year with average grades of 83.6 and 83.1, respectively. Findings indicate that the respondents' children performed adequately in modular distance learning.

The result is parallel to the study of Agarin (2021) and Romel et al., (2022) which revealed students perform very satisfactorily in modular distance learning. Similarly, Gossenheimer et al. (2017) found that students' average grades for distance modality are higher than that of face-to-face classes. This entails that even in distance learning, students are learning and obtaining new knowledge with the guidance and supervision of their parents and good teacher communication.

Table 5: Academic Performance of the Students

Quarter	Mean (SD)	QD
First quarter	83.6(3.6)	Satisfactory
Second quarter	83.1(3.7)	Satisfactory
Average	83.3(3.3)	Satisfactory

4.4 On the Significant Difference in the Perceived Challenges of Parents in the Implementation of Modular Distance Learning when Grouped According to Profile Variables

This part highlights the result of parents' perceived challenges that revealed a significant difference when grouped according to age, sex, number of children enrolled in school, educational attainment, monthly income, and occupation. The significant difference in the perceived challenges of parents in implementing modular distance learning when grouped according to profile variables was investigated, and the results are presented in Table 6.

As observed from the findings, p-values are greater than 0.05 level of significance across all factors and profile variables. It was concluded that there is "no significant difference" in the individual-related challenges when grouped according to sex, age, no of children in school, monthly income, occupation, and educational attainment. There was also no statistically significant difference in the perceived instructional-related challenges encountered by parents in the implementation of modular distance learning based on groups sex, age, no of children in school, monthly income, occupation, and educational attainment. Findings also suggest that institutional-related challenges met by the parents in implementing modular distance learning based on groups' sex, age, number of children in school, monthly income, occupation, and educational attainment have "no significant difference."

The result implies that parents' profile variables, when grouped as to sex, age, number of children in school, monthly income, occupation, and educational attainment, posed no connection or are not a contributory factor to individual-related, instructional-

related, and institutional-related challenges met by parents in the implementation of modular distance learning. Trovela (2021) revealed that despite the different challenges and disadvantages brought by modular distance learning as a contemporary strategy is an effective tool for learners and parents. Parent support can significantly contribute to the success of learners in distance (Feng & Cavanaugh, 2011; Lee & Figueroa, 2012).

Table 6: Significant Difference in the Perceived Challenges of Parents in the Implementation of Modular Distance Learning when Grouped According to Profile Variables

Challenges	Profile	df	F	P	Remarks
Individual-Related Challenges	Sex	1	3.10	0.08	Not significant
	Age	4	1.47	0.21	Not significant
	Educational Attainment	6	1.38	0.22	Not significant
	Monthly income	3	0.34	0.80	Not significant
	No. of children in school	6	0.68	0.67	Not significant
	Occupation	12	1.60	0.09	Not significant
Instructional-Related Challenges	Sex	1	0.16	0.69	Not significant
	Age	4	1.18	0.32	Not significant
	Educational Attainment	6	0.53	0.79	Not significant
	Monthly Income	3	1.65	0.18	Not significant
	No. of Children in School	6	0.43	0.86	Not significant
	Occupation	12	1.60	0.09	Not significant
Institutional-Related Challenges	Sex	1	2.11	0.15	Not significant
	Age	4	1.18	0.32	Not significant
	Educational Attainment	6	1.08	0.37	Not significant
	Monthly income	3	0.52	0.67	Not significant
	No. of children in school	6	1.64	0.14	Not significant
	Occupation	12	0.73	0.72	Not significant

4.5 On the Significant Relationship between the Challenges Met by the Parents and the Academic Performance

A moderate, negative correlation between individual-related challenges of the parents and the academic performance of their children in school, was observed and statistically significant ($r = -0.41$, $p = .04$). This would suggest that as the individual-related challenges encountered by the parent increases, the academic performance of their children tend to decline. Individual-related challenges faced by parents are a factor in why students' academic performance decreases. There was also significant, moderate, negative correlation between individual-related challenges of the parents and the academic performance of their children in school, ($r = -0.37$, $p = .03$). In other words, the increase in the academic performance of the student is related to the decrease in the instructional-related challenges met by the parents. Thus, the more problems or challenges encountered by the parents, the greater is the chance that their child perform less academically. On the other hand, there was a statistically significant relationship between institutional-related challenges of the parents and the academic performance of their children in school, however, weak, and negative ($r = -0.28$, $p = .039$). This signifies that the

connection of the academic performance of the students to the institutional-related challenges experienced of the parents is insubstantial.

A study by Miguel et al. (2021) revealed parental involvement efforts in their child's education lead to academic achievement and could improve learning motivations. Hence, sustaining partnership among stakeholders is vital in today's new normal way of education. Moreover, Trovela (2021) stated that parents found modular distance learning quite hard for them in the aspect of education because of the challenges in access to the internet, answers are not written in the answer key of modules and their lessons in face-to-face are way different from modular learning.

This part stresses the result of the significant relationship between the challenges of parents in the implementation of modular distance learning and the academic performance of their child particularly if the challenges met by parents affect the academic performance of their child. A significant relationship between the Challenges met by the parents on the implementation of modular distance learning and the academic performance of their child was also examined and the results were displayed in Table 7.

Table 7: Significant Relationship between the Challenges met by Parents on the Implementation of Modular Distance Learning and the Academic Performance of their Child

Type of Challenges	r	p-value	Remarks
Individual-Related Challenges	-0.41	0.04	Significant; Moderate relationship
Instructional-Related Challenges	-0.37	0.03	Significant; Moderate relationship
Institutional-Related Challenges	-0.28	0.039	Significant; Weak relationship

5. Recommendations

School administrators are encouraged to delve deeply into the challenges met by parents in the implementation of modular distance learning as they are the partner stakeholders and offer help and remediation to cope with these challenges by giving technical assistance in any form to lessen the parents' burdens. Parents are encouraged to raise the felt challenges to the school administrators to be given a dose of solution or remediation that will lessen their burden that affects the academic performance of their child. Future researchers are motivated to give consideration by pursuing future studies focusing on the immense value of the new learning modalities and their relationship to the student's academic performance in science.

6. Conclusion

Modular distance learning contributed fairly and minimally to students' performance in science brought about by continued social and academic adjustment. Individual-related challenges and filtering on financial difficulties emerged as the greatest challenge the parents ever met in the implementation of modular distance learning. Parents' profile does not have a direct bearing on their felt challenges. An increase in individual-related and instructional-related challenges of parents tends to decrease their child's academic

performance. Similarly, as institutional-related challenges increase, children's academic performance decreases.

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References

Agarin, M. A. L. (2021). The Challenges and Status of Modular Learning: Its Effect to Students' Academic Behavior and performance. *EPRA International Journal of Multidisciplinary Research*.

Alampay, L. P., & Jocson, M. R. M. (2011). Attributions and attitudes of mothers and fathers in the Philippines. *Parenting*, *11*(2-3), 163-176.

Al-Kellani, & Al-Shraifeen (2011). Introduction to research in education and social sciences (3rd ed.). Dar Al Masirah for Publishing, Distribution, and Printing.

Anzaldo, G. D. (2021). Modular Distance Learning in the new normal education amidst Covid-19. *International Journal of Scientific Advances*, *2*(3), 233-266.

Auditor, N., & Mutya, R. C. (2022). Competence of Secondary Science Teachers in Developing Self-Learning Modules (SLMs). *Jurnal Pendidikan Progresif*, *12*(2), 569-590.

Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human behavior and emerging technologies*, *2*(2), 113-115.

Bartolome, M. T., Mamat, N., & Masnan, A. H. (2017). Parental Involvement in the Philippines: A Review of Literatures. *International Journal of Early Childhood Education and Care*, *6*, 41-50.

Bhamani, S., Makhdoom, A. Z., Bharuchi, V., Ali, N., Kaleem, S., & Ahmed, D. (2020). Home learning in times of COVID: Experiences of parents. *Journal of Education and Educational Development*, *7*(1), 9-26.

Cahapay, M. B. (2021). Involvement of parents in remote learning of children amid COVID-19 crisis in the Philippines: A transcendental phenomenology. *International Journal of Sociology of Education*.

Chan, J. R., Marasigan, A. C., & Santander, N. T. (2021). Multigrade teachers' experiences and learning assessments on modular remote teaching during the COVID-19 pandemic. *International Journal of Research*, *10*(6), 95-107.

Cheng, Z., Mendolia, S., Paloyo, A. R., Savage, D. A., & Tani, M. (2021). Working parents, financial insecurity, and childcare: mental health in the time of COVID-19 in the UK. *Review of Economics of the Household*, *19*(1), 123-144.

Cluver, L., Lachman, J. M., Sherr, L., Wessels, I., Krug, E., Rakotomalala, S., ... & McDonald, K. (2020). Parenting in a time of COVID-19. *Lancet*, *395*(10231).

Coyne, I., & Cowley, S. (2007). Challenging the philosophy of partnership with parents: A grounded theory study. *International journal of nursing studies*, *44*(6), 893-904.

DepEd. (2020). Adoption of the basic learning continuity plan for S.Y. 2020-2021 in the light of Covid-19 public health emergency.

Feng, L., & Cavanaugh, C. (2011). Success in online high school biology: Factors influencing student academic performance. *The Quarterly Review of Distance Education, 12*(1), 37–54,71–72.

Garbe, A., Ogurlu, U., Logan, N., & Cook, P. (2020). COVID-19 and remote learning: Experiences of parents with children during the pandemic. *American Journal of Qualitative Research*, *4*(3), 45-65.

Garcia, A. (2018). *Parental involvement among low-income Filipinos: A phenomenological inquiry* (Doctoral dissertation, The University of Nebraska-Lincoln)

Geverola, I. J., Mutya, R. C., Siason, L. M. B., & Bonotan, A. (2022). Challenges and struggles of public senior high school science teachers during the new normal. *Journal of Research, Policy & Practice of Teachers and Teacher Education, 12*(1), 49-68.

Goodall, J., & Montgomery, C. (2014). Parental involvement to parental engagement: A continuum. *Educational review*, *66*(4), 399-410.

Gossenheimer, A. N., Bem, T., Carneiro, M. L. F., & de Castro, M. S. (2017). Impact of distance education on academic performance in a pharmaceutical care course. *PloS one*, *12*(4), e0175117.

Guan, A. G. R., & Benavides, N. G. (2021). Parent-Teacher-Learner Collaboration in Facilitating Modular Instruction. *United International Journal for Research & Technology*, *2*(7).

Hernando-Malipot, Merlina (2020). Role of Parents in the 'new normal' in education crucial-DepEd. Manila Bulletin. Retrieved from: *https://mb.com.ph/2020/04/30/role-of-parents-in-the-new-normal-in-education-crucial-deped/*

Janmaat, G., McCowan, T., & Rao, N. (2016). Different stakeholders in education. *Compare: a journal of comparative and international education*, *46*(2), 169-171.

Jeynes, W. H. (2018). A practical model for school leaders to encourage parental involvement and parental engagement. *School Leadership & Management*, *38*(2), 147-163.

Lee, M., & Figueroa, R. (2012). Internal and external indicators of virtual learning success a guide to success in K-12 virtual learning. *Distance Learning*, *9*(1), 21–28.

Llamas, A. V., & Tuazon, A. P. (2016). School practices in parental involvement, its expected results and barriers in public secondary schools. *International Journal of Educational Science and Research*, *6*(1), 69-78.

Miguel, F. F., Prudente, M. S., & Aguja, S. E. (2021, January). Teachers Initiatives and Perceived Parental Involvement Practices among Filipino Junior High School Students. In *2021 12th International Conference on E-Education, E-Business, E-Management, and E-Learning* (pp. 173-180).

Montoya, S. (2020). Nurturing education at home in the midst of a health crisis: how SDG indicator 4.2. 3 can help guide where more support is needed. *UNESCO Institute for Statistics*, *9*.

Obiedat, D. H., Kayed, A., & Adass, A. (2016). Scientific research: Understandable, tools, and methods. Publishers and distributors.

Olivo, M. G. (2021). Parents' Perception on Printed Modular Distance Learning in Canarem Elementary School: Basis for Proposed Action Plan. *International Journal of Multidisciplinary: Applied Business and Education Research*, *2*(4), 296-309.

Owusu-Fordjour, C., Koomson, C. K., & Hanson, D. (2020). The impact of Covid-19 on the learning - The perspective of the Ghanaian student. *European Journal of Education Studies*.

Parczewska, T. (2021). Difficult situations and ways of coping with them in the experiences of parents homeschooling their children during the COVID-19 pandemic in Poland. *Education 3-13*, *49*(7), 889-900.

Rahmadani, D., Chastanti, I., & Harahap, D. A. (2021). Parents' Role in Biology Learning During the Covid 19 Pandemic. *Jurnal Penelitian Pendidikan IPA*, *7*(2), 137-142.

Ramadhan, S., Indriyani, V., Asri, Y., & Sukma, E. (2020, February). Design of learning modules writing narrative text based on Project Based Learning (PjBL) by using mobile devices. In *Journal of Physics: Conference Series* (Vol. 1471, No. 1, p. 012029). IOP Publishing.

Romel, M. C., Jun, G. R. I., Alfredo Jr, C. C., & Renato, F. V. (2022). Coping with uncertainties: Unveiling the lived experiences of working students in the new normal. *Ho Chi Minh City Open University Journal of Science-Social Sciences*, *12*(1), 115-131.

Sahithya, B. R., Kashyap, R. S., & Roopesh, B. N. (2020). Perceived stress, parental stress, and parenting during COVID-19 lockdown: A preliminary study. *Journal of Indian Association for Child and Adolescent Mental Health-ISSN 0973-1342*, *16*(4), 44-63.

Saleh, M. N. I., Sari, R., & Alim, P. (2021). University students' perception on the implementation of online learning during the Covid-19. *Nazhruna: Jurnal Pendidikan Islam*, *4*(1), 1-17.

Trovela, E. S. (2021). Perceptions Of Parents and Learners to Modular Distance Learning as Contemporary Teaching Strategy. *EPRA International Journal of Research and Development*. https://doi.org/10.36713/epra7330.

UNESCO (2021). Distance learning strategies in response to COVID-19 school closures. UNESCO COVID-19 Educ. Response 2020, 2, 1–8. Educ. Sci. 2021, 11, 302 17 of 17

Viner, R. M., Russell, S. J., Croker, H., Packer, J., Ward, J., Stansfield, C., ... & Booy, R. (2020). School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. *The Lancet Child & Adolescent Health*, *4*(5), 397-404.

Wajdi, M. B. N., Kuswandi, I., Al Faruq, U., Zulhijra, Z., Khairudin, K., & Khoiriyah, K. (2020). Education policy overcome coronavirus, a study of Indonesians. *EDUTEC: Journal of Education and Technology*, *3*(2), 96-106.

World Health Organization (2020). Coronavirus disease (COVID-19) advice for the public: Advocacy. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-forpublic/healthy-parenting

Yamamoto, Y., Holloway, S. D., & Suzuki, S. (2016). Parental engagement in children's education: Motivating factors in Japan and the US. *School Community Journal*, *26*(1), 45-66.

Zainuddin, Z., Perera, C. J., Haruna, H., & Habiburrahim, H. (2020). Literacy in the new norm: stay-home game plan for parents. *Information and Learning Sciences*, *Vol. 121*, No. 7/8, pp. 645-653.