

# Motivation to Study During COVID-19 as a Function of Parent Marital Status

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**Abstract:** The COVID-19 pandemic brought the learning process into the home and family space, such that parent marital status can affect the student's studies. These circumstances might pose a challenge for students in general and in particular for those coping, in addition to COVID-19, with family difficulties such as their parents' divorce. Hence, it is necessary to examine how family situations affect students' functioning and motivation to study. The current study seeks to address the issue of motivation to study among children of divorced parents versus children of married parents, particularly following the effects of distance learning during COVID-19. This is a pilot study that explores the association between motivation to study in a time of crisis (COVID), which requires a new (digital) study skill, and familial status, family support. In order to relate to this issue, we conducted a study among 148 respondents, school children aged 12-18. Forty-three percent of the respondents were children of divorced parents, while 52.7% were the children of married parents. Through questionnaires, these respondents addressed their parents' marital status and their attitude to distance versus face-to-face learning. The study also addressed the motivation of these teenagers to study and the association between the different learning methods and parent marital status. The research findings indicate that children of divorced parents have lower intrinsic motivation than children of married parents. It was also found that the variable most influencing motivation to study is learning in the face-to-face method, at 17.1%. A decline in motivation in general, and higher extrinsic motivation among children of divorced parents, derive mainly from parent marital status and the complexities stemming from parents' divorce. The unstable psychological state of children of divorced parents, both in general and during COVID-19 in particular, affect the level of motivation to study. The findings of the current study indicate the complexities experienced by students during distance learning, their preferences for a certain study method, whether face-to-face or online, and their motivating factors, whether extrinsic or intrinsic. In addition, the study indicated the significance of family support, with its complexities. The research findings may have considerable consequences for the coping of students from different types of families, in normal times in general and in times of crisis in particular.

**Keywords:** Covid 19, divorced parents, married parents, motivation, digital study, distance learning, face to face learning, family space, motivation, distance learning, study method, family support

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## 1. Introduction

It is evident from the research literature that parent marital status has a considerable impact on their children. Hence, there are differences between children of divorced parents and children of married parents. It is clear that divorce is a grave crisis for children as this dramatic family event weakens the family system responsible for providing their mental and emotional needs as well as with a sense of support, protection, and security (Levy-Shiff, 2018). Cohen (2016) too claims that divorce is perceived as one of the toughest life events, one that generates crisis and trauma for the parents and their children.

The literature also describes the various effects of e-learning versus face-to-face learning on students. A study that examined the effect of the changing teaching and learning methods on motivation to study following COVID-19, found that students reported less motivation to study than before the pandemic. Moreover, students reported spending less time studying than before and also participated less in lectures and virtual encounters and were less appreciative of online versus face-to-face encounters (Meeter et al., 2020).

COVID-19 brought with it many challenges to the world in general and to the educational system in particular. These include social distancing and the need for proper continuation of school-based learning and development (Ben-Amram and Davidovitch, 2021). In order to meet these needs, educational systems in Israel and elsewhere have shifted to distance learning that includes online lessons and many attempts to facilitate

adequate studies despite the upset circumstances. These changes put the students in an unfamiliar and uncertain state that questions their motivation to study (McCarthy, 2020). The COVID-19 pandemic has brought the learning process into the home and family space, such that the parents' marital status can affect the students' studies. These circumstances might pose a challenge for students in general and in particular for those who experience family hardships such as parent divorce, in addition to COVID-19.

Hence, it is necessary to examine how family situations affect students' functioning and motivation to study. The current study seeks to address the issue of motivation to study among children of divorced parents versus children of married parents, particularly following the effects of distance learning during COVID-19.

## 2. Literature review

In March 2020 Israel's educational system was closed and all studies moved to the home court for about two years. Studies indicate that closure of educational institutions has complex implications for students and their families (Ben-Amram and Davidovitch, 2021). During COVID-19 the educational system moved to e-learning from home, and the parents' involvement in the study process increased. Students' parents helped provide the mental, administrative-infrastructure, technical, and pedagogic support necessary in order to allow teachers to apply remote learning. This period enhanced the blurred boundaries between the home and the school, the home and teaching, the family and the school, and also enhanced the blurred boundaries between parents and teachers, children and parents (Cho, 2020). The technology demanded a new view of the mutual relations between the school and the family as well as the role of each in the children's development process (Garbe et al., 2020). Parents were compelled to be more involved in their children's learning process.

Studies conducted on online learning spaces even before the pandemic show that parents become students' learning coaches (Waters and Leong, 2014). Teachers reported identifying parents' help as beneficial for virtual students in organizing and managing students' schedule, nurturing relationships and interactions, motivating student involvement, and guiding students when necessary (Borup, 2016).

## 3. E-Learning during COVID-19

E-Learning, also called digital learning or computer-based learning, is carried out through digital devices intended for assisted learning (Mayer and Clark, 2016). This definition includes three parts that relate to the following aspects: components of the study material, how it is conveyed, and the reasons.

**Components of the study material:** When dealing with the components of the material presented we shall examine how the contents are conveyed: through spoken or printed words, use of graphics or animation, use of illustrations, diagrams, pictures, or contents conveyed by video.

**How the material is conveyed:** With regard to how the material is conveyed, we shall relate to the means of conveyance: personal computer, laptop, tablet, smartphone, or virtual reality.

**Reason for conveying the material:** This issue relates to the purpose of teaching as a change agent of the student's knowledge (Mayer and Clark, 2016). E-learning allows many innovative approaches that support learning, but there is also need for research-based principles in order to enable best utilization of these approaches. In addition, e-learning poses a challenge also for guiding teaching, as it does not cause learning rather learning is generated by the teaching methods within the online medium (Clark, 2011).

Following the outbreak of COVID-19, many different educational institutions were compelled to remain closed temporarily and e-teaching became a necessity. Institutions shifted their pedagogy from face-to-face to online, even when to begin with they had no intention of integrating modern technology (Dhawan, 2020).

Students often experience e-teaching as boring and uninvolved (Dhawan, 2020). Also, two-way interactions, where students respond and are responded to, is important and not always implemented in e-teaching (Dhawan, 2020). The lack of social contact (McCarthy, 2020), as well as technical problems, also constitute main barriers to e-learning (Song et al., 2004; Ben Amram and Davidovitch, 2021). The current circumstances of remote e-learning are unique, unlike any other digital learning situation prior to the virus, as current studies are crisis-based (Pace-Pettit and Barker, 2020). A study that examined e-learning during COVID-19 found that the lack of class socialization caused difficulties with carrying out group tasks in distance learning, as reported

by 42.9% of the students, and about 50.8% of the students thought that full courses could not be efficiently completed via e-learning. Moreover, 78.6% of the students felt that face-to-face connection with the teacher is important for their studies and is absent in the current circumstances of remote learning (Dhawan, 2020). Another study that examined the effect of COVID-19 and of staying at home on motivation to learn found that students reported a decline in motivation compared to before the COVID-19 pandemic. This decline in motivation was associated with a drop in efforts. Students reported that they spent less time studying than in the past and participated less in virtual encounters and lectures. They also expressed less appreciation towards online encounters compared to face-to-face encounters and noted the lack of social interaction as the most significant cause of the decline in motivation (Meeter et al., 2020). The global pace and extent of the current lack of educational stability are huge, and might result in various levels of psychological distress and pain (McCarthy, 2020).

#### **4. Motivation for learning**

Motivation is the desire to invest time and effort in a certain activity even when it involves hardships, a high price, or lack of success (Gorev, 2018). Avi Assor, in his article, defines motivation similarly, and adds to this definition that motivation is an internal mental entity whose intensity can be assessed variably. For instance, by verbal reports and conversations or by following behavioral manifestations, such as investing time and efforts in the relevant activity, attendance and punctuality, persistence and effort despite difficulties or failure, responding to challenges and meeting commitments (Assor, 2001). From the learning respect, motivation is a vital component of academic performance and high levels of it are associated with good academic performance (Kusurkar et al., 2013). Students with high motivation to learn tend to invest more efforts in learning, leading to better results (Gottfried, Marcoulidis, Gottfried and Oliver, 2013). This motivation of both teachers and students, is an important component in the academic climate and in setting the personal progress of participants in the educational discourse (Gorev, Weisman and Lauterstein-Fitlik, 2018). Academic motivation can be divided in two: intrinsic motivation and extrinsic motivation. Intrinsic motivation is defined as carrying out an activity for the satisfaction it entails rather than for any other outcome. It relates to the aspiration to meet high standards of excellence, and to one who operates for the purpose of enjoyment or challenge rather than for incentives (Gorev, 2018). This generates interest-based learning, and when learning derives from interest more time and thought is invested in it, knowledge is processed more intensively and remembered over time (Motero, Shternlicht and Goverman, 2011). This state stems from several factors such as: investment due to identifying the inner value of the activity, the activity provides interest, enjoyment, or moral value. Such investment is related to shaping one's personal identity, realizing or forming values and goals, and the need for a challenge, i.e., a sense of ability and control, acquiring skills, and undermining premises. Motivation stemming from these factors is accompanied by positive feelings such as lack of conflict, relative serenity, gratification, expression of a cognitive, motor potential, or a symbolic expression – enjoyment from operating one's thoughts, operating one's muscles, and imagination games (Assor, 2001). Students who rely on autonomous motivation (internal motivation) usually display more flexibility and creativity in how they do things (Gorev, 2018). Moreover, this state also predicts high academic achievements (Veder-Weiss, 2013).

In contrast, extrinsic motivation is associated with activities aimed at reaching a defined result due to an external constraint or requirement. Hence, it leads at times to high academic achievements but involves negative feelings and mental harm (Gorev, 2018). It originates from several factors: the need for belonging and acceptance by society, social evaluation, and social status, efforts made for concern of rejection by familiar others or by oneself, efforts made for fear of punishment or in the hope of material reward, or efforts made as a result of pressure by a figure of authority. Many research findings indicate that motivation stemming from these factors often comes at a high emotional and cognitive price for students. In addition, these motivators are accompanied by negative feelings such as anxiety, anger, shame, guilt, strong internal conflict, and pride (Assor, 2001).

Hence, it is clear that intrinsic motivation is more efficient and effective than extrinsic motivation. When students operate from an internal desire, on one hand they feel satisfaction, mental well-being, and vitality, and on the other less feelings of frustration, anger, or jealousy, and even aggressiveness (Gorev, 2018). Students with high intrinsic motivation have a higher likelihood of participating in activities, being involved, and enjoying the learning process (Ramadhani and Ritonga, 2020).

As mentioned, when the learning method shifts from the classroom to the internet students are often required to enlist higher motivation than in face-to-face learning in order to cope with their studies. This is because the web-based learning environment depends on motivation features such as inquisitiveness and self-regulation. In fact, technology itself is perceived by some people as causing motivation, as it combines qualities recognized as important for nurturing motivation, such as challenge, inquisitiveness, innovation, and fantasy (Ramadhani and Ritonga, 2020). One of the main problems encountered in the online learning environment is related to a decline in students' motivation to learn over time (Karaoglan and Yilmaz, 2019). A significant reason for this is associated with the fact that students often do not know what to do in the online learning process and need external support. This is particularly evident among students who did not develop self-learning skills and need external guidance for e-learning (Karaoglan Yilmaz, Olpak and Yilmaz, 2018). It appears that not all students will do well in the e-learning process and the reasons for this derive from differences in learning, in environmental elements, and in the student's personal characteristics (Ramadhani and Ritonga, 2020). One of the environmental reasons found related to a decline in students' motivation, involvement, and autonomy is their parents' divorce (Nusinovici et al., 2018).

## 5. Children of divorced parents

The rise in divorce rates is one of the dramatic changes that has occurred in family life in the last fifty years. Parents' divorce has significant consequences not only for the divorcing parents but rather also for their children. These consequences originate from the conditions in which the children develop and are raised and from the family relations with which the children are compelled to deal. Divorce is a grave crisis for children because it weakens the family system that is responsible for providing them with their mental and emotional needs as well as with a sense of support, protection, and security (Levy-Shiff, 2018). Support of this is provided by Dana Cohen (2016), who claims that divorce is perceived as one of the most severe life events and a crisis and traumatic event for the divorcing parents and their children. Moreover, children perceive parents' divorce as one of the two gravest life experiences, second only to the loss of a parent. In addition, the common view in the literature relates to children of divorced parents as victims of life experiences who suffer from social injustice and its grave implications for their development. In addition to the children's feelings, many divorced parents might experience significant and long-term effects of the emotional burden of divorce, which might be manifested as chronic stress (Hald et al., 2020). This pressure might be enhanced among parents who must continue maintaining ties with their former spouses for the sake of the children (Raley and Sweeney, 2020).

Children who experience their parents' divorce might be adversely affected on several dimensions. For instance, in the social domain. Twenty-five percent of children of divorced parents report long-term social problems, versus 10% of children of married parents. Children of divorced parents are relatively less socially accepted and also find it hard to develop an intimate relationship with a partner than children of married parents (Majadla, 2015). The effect of divorce on children can also be seen on the behavioral dimension. As part of the behavioral effects, problems involving inappropriate behavior, aggressiveness, outbursts, and even use of psychoactive substances and delinquency, might emerge (Cohen, 2016). Other behavioral problems found are problems with the police and disciplinary problems at school, such as suspension (Majadla, 2015). Disciplinary problems and suspension from school are associated with another dimension of harm to children following their parents' divorce, which is the academic dimension. Many studies found a negative correlation and effect on studies as a result of parent divorce, both with regard to achievements and with regard to motivation to study (Hald et al., 2020).

Parents' divorce might have a negative impact on academic achievements at school. Lower academic achievements were found among children of divorced parents compared to other children (Majadla, 2015). Similar data were found by Dana Cohen (2016), who claims that, in the cognitive-learning sphere, the child's learning-oriented or environmental attention might be affected by parents' divorce. Sometimes there is even a decline that culminates in dropping out of school. Additional support for this is provided by Rachel Levy-Shiff, who claims that adults with divorced parents have a lower chance of acquiring a higher education, lower academic achievements, and a greater tendency to drop out of school. Levy-Shiff adds that these are associated with lower scores on measures such as occupational prestige and job satisfaction, while financially children of divorced parents have a lower income, less property, and are characterized by financial pressures (Levy-Shiff, 2018).

It appears from the above that students with divorced parents have deficient motivation. A negative association was found between motivation to learn and children of divorced parents, such that it may be hypothesized that lack of motivation is positively correlated with low academic achievements. In addition, the spirit of the times together with COVID-19 and distance learning on the web have generated many challenges for students, including a drop-in motivation to learn (Goldberg, Allen and Smith, 2021). Children of divorced parents seem to be experiencing a double crisis during COVID-19, one that is connected both to their studies and to their family.

During COVID-19, divorced parents naturally have many disagreements concerning supervision of distance learning, where each side places the responsibility on the other, claiming that the other does less for the children (Goldberg, Allen and Smith, 2021). Accordingly, adolescents with low reported levels of parental support, typical of many families with divorced parents, were found to have lower motivation to learn online than face-to-face (Klootwijk et al., 2021). Secondly, when the shaky family support is joined by the many changes that have occurred following COVID-19, children's emotional and psychological strength to deal with the circumstances is limited. It appears that the negative effects of this unusual situation, such as lockdowns, social distancing, and distance learning, are felt less by people with high psychological stamina, while those with low psychological stamina are much more badly affected by the global pandemic (Kocak et al., 2021).

The purpose of the current study is to examine the association between parents' marital status, i.e., divorced or married, and their children's motivation to learn, during distance learning in the COVID-19 era. Family dynamics and the family structure affect every individual in the family unit and negative dynamics have a negative impact on children of divorced parents and their achievements. Hence, a complex family situation such as parents' divorce, together with the COVID-19 period that generated new anxieties and fears, are changes that might also affect academic achievements and motivation to learn among children of divorced parents. It is clear that there is insufficient information in the research literature on the nature of the association between parents' marital status and the impact on motivation among children and that truly understanding this association can help understand how to support students who might sometimes be overlooked.

## **6. The current research hypotheses are:**

**H1** – The level of intrinsic motivation for online learning among children of married parents will be higher than among children of divorced parents.

**H2** – The level of extrinsic motivation for online learning among children of married parents will be lower than among children of divorced parents.

**H3** – Higher motivation to learn face-to-face will be found than to learn online.

## **7. Method**

### **7.1 Participants**

Our participants consisted of 148 junior high and high school students in the 12-18 age range. The sample was divided into children of divorced parents and children of married parents.

### **7.2 Research tools and research procedure**

The questionnaire utilized in the current study included two parts. In the first part the respondents provided sociodemographic details: age, gender, place of residence, place of parents' birth. In addition, the questionnaire included a question distinguishing between children of divorced parents and children of married parents. This distinction between the respondents created a division into two groups of respondents: children of divorced parents and children of married parents.

In the second stage, the respondents completed a questionnaire on motivation for distance learning, which includes questions distinguishing between distance learning and face-to-face learning. Moreover, this questionnaire included questions distinguishing between intrinsic motivation to learn and extrinsic motivation. The questionnaires were administered to the respondents through Google Forms, and sent to them via social networks (WhatsApp, Facebook). The respondents completed the research questionnaires with no time limitations. All their responses were collected by Google Forms and entered in the SPSS program for statistical analysis.

## 8. Research findings

### 8.1 Sample characteristics

The research participants consisted of 148 respondents, high school students aged 12-18, during the school year. Table 1 presents the distribution of the continuous demographic variable of age.

**Table 1:** Distribution of the age variable

Variable	Range	M	SD
Age of respondent	12-18	16.17	1.426

It is evident from this table that the mean age of the respondents is 16.17 and the standard deviation is 1.426. Moreover, the range of the respondents' age is 13-18.

**Table 2:** Distribution of the parent marital status variable

Variable	Values	N	%
Parent marital status	Divorced parents	70	47.3
	Married parents	78	52.7

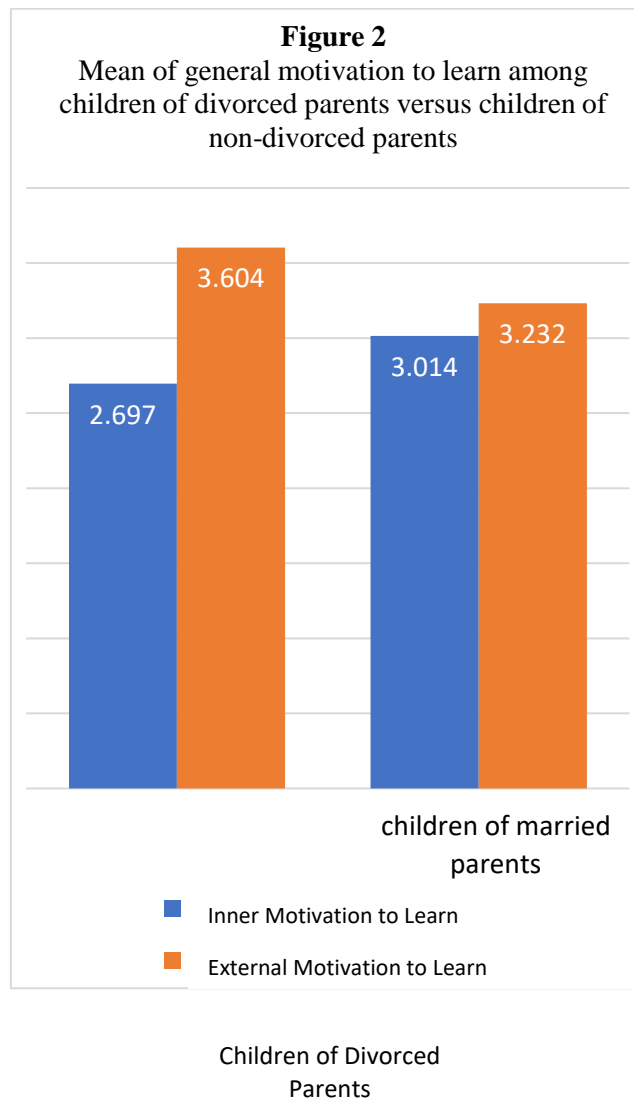
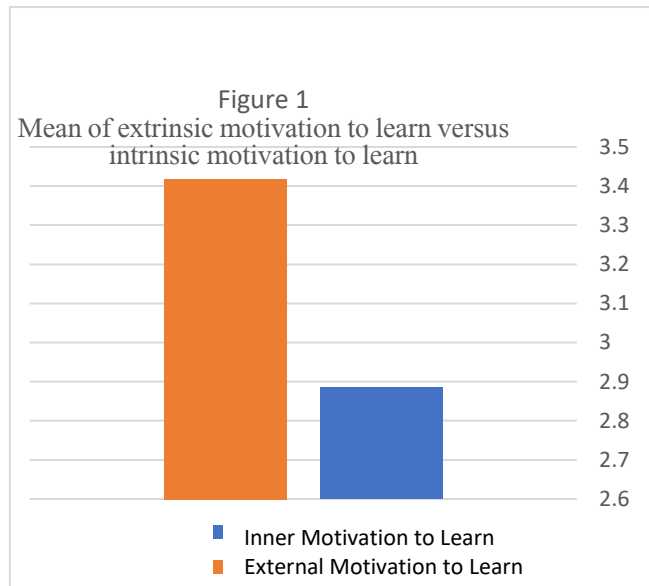
It is evident from this table that the relative prevalence of children of divorced parents (47.3%) in the sample is almost identical to the relative prevalence of children of married parents (52.7%).

Figure 1 shows the differences in the mean of intrinsic motivation to learn among the respondents compared to the mean of their extrinsic motivation to learn.

In order to check for differences in the mean of intrinsic motivation to learn among the respondents compared to the mean of their extrinsic motivation to learn, a t-test for dependent samples was conducted. The mean for extrinsic motivation to learn ( $M=3.408$ ,  $SD=0.749$ ) was found to be significantly greater and at a considerable distance from the mean for intrinsic motivation to learn ( $M=2.864$ ,  $SD=0.566$ ) ( $t(147) = 7.603$ ,  $p<0.01$ ).

Figure 2 shows the differences in the mean of intrinsic motivation to learn among respondents compared to the mean of their extrinsic motivation to learn, among children of divorced versus children of married parents. This figure repeats that found in Figure 1, whereby the mean of extrinsic motivation to learn among the respondents is higher than their intrinsic motivation, as evident among both children of divorced and children of married parents. Moreover, these differences are much more evident among children of divorced parents, such that the differences between extrinsic motivation to learn and intrinsic motivation to learn among children of divorced parents are almost five times higher than among children of married parents.

Further details of these data are available in the forthcoming analysis of the two first research hypotheses.





## 9. Examination of the hypotheses

**Hypothesis 1:** The level of intrinsic motivation to learn among children of married parents will be higher than among children of divorced parents.

In order to check for differences in the level of intrinsic motivation to learn among children of divorced parents versus children of married parents, assuming that the level of intrinsic motivation to learn among children of married parents will be higher than the level of intrinsic motivation to learn among children of divorced parents, a t-test for two independent samples was conducted.

**Table 3:** T-test for independent samples to check for differences in the level of intrinsic motivation among children of divorced parents versus children of married parents

Variable	N	M	SD	T	P
Divorced parents	70	2.697	0.568	3.531	.001
Married parents	78	3.014	0.524		

This analysis found, as hypothesized, that the mean of intrinsic motivation to learn among children of married parents ( $M=3.014$ ,  $SD=0.524$ ) is higher than among children of divorced parents ( $M=2.697$ ,  $SD=0.568$ ) ( $t_{(146)}=3.531$ ,  $p<0.01$ ). This result can be seen in Figure 2 above.

**Hypothesis 2:** The level of extrinsic motivation to learn among children of married parents will be lower than among children of divorced parents. In order to check for differences in the level of extrinsic motivation to learn among children of divorced parents versus children of married parents, assuming that the level of extrinsic motivation to learn among children of married parents will be lower than among children of divorced parents, a t-test for two independent samples was conducted.

**Table 4:** T-test for independent samples to check for differences in the level of extrinsic motivation among children of divorced parents versus children of married parents.

Variable	N	M	SD	T	P
Divorced parents	70	3.604	0.692	3.098	.002
Married parents	78	3.232	0.760		

This analysis found, as hypothesized, that the mean of extrinsic motivation to learn among children of married parents ( $M=3.232$ ,  $SD=0.760$ ) is lower than among children of divorced parents ( $M=3.604$ ,  $SD=0.692$ ) ( $t_{(146)}=3.098$ ,  $p<0.01$ ). This result is evident in Figure 2 above.

**Hypothesis 3:** Higher motivation to learn face-to-face will be found than to learn online.

In order to examine this hypothesis, a stepwise multiple regression analysis was conducted for the independent variables of e-Learning and face-to-face learning, in order to check which of these variables is the most meaningful for forming motivation to learn (the dependent variable). Furthermore, the variable of parent marital status (divorced or married parents) was also entered in this model in order to check its impact on motivation to learn. Table 5 presents this analysis.

**Table 5:** Stepwise regression for examining the effect of the independent variables on motivation to learn

Steps of the regression model	Variable	$\beta$	R	R square	R square change	F
1			0.413	0.171	0.171	30.095
	Face-to-face learning	0.413**				
2			0.473	0.224	0.053	20.092
	Face-to-face learning	0.479**				
	E-Learning	0.239**				
3			0.519	0.270	0.046	17.721
	Face-to-face learning	0.556**				
	E-Learning	0.261**				
	Parent marital status	-0.226**				

\* $p<0.05$  \*\* $p<0.01$



It is evident from this table that the analysis found that the variable with the most contribution to motivation to learn is face-to-face learning. In addition, this variable explained 17.1% of the variable of motivation to learn, such that the more face-to-face the method of learning the greater the motivation to learn. Moreover, it is evident that the explained variance of motivation to learn by e-Learning and parental status is 5.3% and 4.6%, respectively, and that the explained variance by the three independent variables examined is 27%.

In addition, it is evident from the third regression model that face-to-face learning is the variable with the largest unique contribution to predicting motivation to learn of all independent variables explored ( $\beta=0.556$ ,  $p<0.01$ ).

## **10. Discussion and conclusions**

The purpose of the current study was to examine the association between the marital status of divorced and married parents and their children's motivation to learn, in a time of distance learning during COVID-19. For this purpose, we examined two groups: a group of children with divorced parents and a group of children with married parents, who completed self-report questionnaires on their parents' marital status, their views regarding distance learning versus face-to-face learning, their motivation to learn, and a questionnaire on personal information. The hypothesis was that among children of divorced parents' higher extrinsic motivation and lower intrinsic motivation would be found that among children of married parents, and higher motivation to learn would be found among both groups in the face-to-face method. The study is the first to explore the association between motivation to study in a time of crisis (COVID), which requires a new (digital) study skill, and familial status, family support.

New findings in the literature indicate that the COVID-19 pandemic caused people to change their regular life style, as evident mostly outside the home, and instead brought the daily routine into the home, including studies, together with the effect of the negative news in the media and the concern of lockdown and restrictions. The negative effects of an irregular situation such as the COVID-19 pandemic are felt less by people with considerable psychological stamina compared to people with low psychological stamina who are much more negatively affected by the global pandemic than the former (Kocak et al., 2021). The transition to distance learning and the challenges it entails are also concerning, as parents are required to provide their children with support that they themselves lack. This state might adversely affect parent and child burnout (Griffith, 2020). This, of course, in addition to the fact that parent divorce constitutes a grave crisis for the children since it weakens the family system that is supposed to provide the children with their mental and emotional needs and give them a sense of support, protection, and security (Levy-Shiff, 2018).

The first research result indicated that children of married parents have higher intrinsic motivation to learn than children of divorced parents, a fact showing that children of married parents are less inundated by negative feelings and have relatively greater serenity and satisfaction with their life (Assor, 2001). It may be assumed that intrinsic motivation among children reflects their psychological stamina, which allows them to better experience the COVID-19 period with all its changes and pressures from a place of intrinsic motivation, in contrast to children in the other category.

The second research result presents the significant difference in extrinsic motivation to learn, which exists on higher levels among children of divorced parents more than among children of married parents. This research result seems to indicate the motivation sources of children of divorced parents and to illuminate possible difficulties they encounter with learning in general and distance learning in particular. It is well known that extrinsic motivation often stems from fear of punishment or hope for reward, and this type of motivation has severe emotional prices (Assor, 2001). Notably, divorced parents too have challenges that are manifested between the spouses. For instance, during COVID-19 divorced parents were found to have many disagreements concerning supervision of distance learning and each side seems to place the responsibility on the other, arguing that each does less for the children (Goldberg, Allen and Smith, 2021). Moreover, divorced parents with a high level of tension following COVID-19 reported higher levels of parenting difficulties than at any other time, with a higher likelihood of utilizing punishments in response to their children's deficient behavior (Sahithya et al., 2020). In light of the current research findings, it may be assumed that children of divorced parents experience emotional difficulties that make all life areas hard for them. The unstable family unit, which becomes at times a battlefield between the parents, particularly during COVID-19, can also explain why students of divorced parents have more extrinsic than intrinsic motivation to learn. It seems that their

desire to do well at school derives from the goal of placating their parents and showing them that they are functioning well. Alternately, it can also be said that among students with divorced parents extrinsic motivation stems from fear that the parents will be angry and punish the children for not displaying the proper achievements and adequate behavior on the academic sphere. A previous study found that one of the environmental reasons related to a drop in motivation for learning, involvement, and the child's autonomy is parents' divorce (Nusinovici et al., 2018). Hence, it may be assumed that the reasons for the decline in motivation in general and for the existence of greater extrinsic motivation among children of divorced parents stems largely from the parents' marital status and the complexities produced by parents' divorce in general and during COVID-19 in particular.

The third research result shows a preference for face-to-face learning over e-learning in the two research groups – children of divorced parents and children of married parents, and that face-to-face learning is directly associated with a rise in motivation. Among students studying face-to-face, motivation to learn and success were found to be higher than in e-learning. Face-to-face learning was also found to explain some 17.1% of the motivation variable, significantly higher than the contribution of e-learning (only some 5.3%). This result is compatible with the premise that e-learning is a significant reason for the decline in motivation to learn, and this is related to the fact that students often do not know what to do in the process of e-learning and need external support. This is particularly conspicuous among students who did not develop self-learning skills and need external guidance for e-learning (Karaoglan Yilmaz, Olpak and Yilmaz, 2018). In the absence of external support and of the development of independent learning methods, many students may feel a lack of success and antagonism towards studying. In addition, a recent study found that adolescents who reported low levels of parental support were found to have lower motivation for e-learning than for face-to-face learning. The academic motivation was positively associated with high levels of intrinsic motivation to learn (Klootwijk et al., 2021).

The findings of the current study seem to be compatible with the findings in the research literature and to add to the association between motivation to learn during COVID-19 and parents' marital status. Also evident is the contribution of the current study, which adds to the research literature and allows an additional angle regarding the association between parents' marital status and their children's extrinsic and intrinsic motivation during COVID-19 and the transition to distance learning. Moreover, the current study seems to illuminate for us the complexity experienced by students during the period of distance learning and their preferences with regard to the learning method – face-to-face or online, as well as the factors that motivate them – extrinsic or intrinsic.

Notably, during COVID-19 many children are affected by pressure, anxiety, and family complexities. This is a new family state, in which all members of the family are at home or, alternately, children of divorced parents sometimes remain alone or with no support. These factors might or can affect the research results in a way that will affect honest and true responses to the self-report questionnaires on occurrences at home between the parents.

The association between motivation to learn and family status during COVID-19 has not yet been investigated significantly, such that our study is a pioneer study that invites additional research that might illuminate family sources of support and their impact on children's motivation when studying from a distance at different ages. These findings raise the need for an intensive discussion by leaders of the educational system on the topic of the added value of the school as an academic-social expanse. In addition, the research findings raise questions concerning the new role of parents within the online school-based learning system and processes.

The research findings indicate a possible direction for students' distress when the home is unstable and therefore there is need for special attention by the various types of educational professionals: teachers, principals. The research findings constitute a foundation for further research on studying in times of crisis, learning in a new era that does not distinguish between the study and home space.

In times of crisis such as COVID, even if parents who are not divorced are not supportive, the children may perceive the home as stable. In a situation when the parents are divorced, we have a crisis situation both within and outside the home: a health situation, a learning situation, a social situation. COVID brought children of divorced parents in Israel back home, to the crisis situation, to the same place.

The research findings aim a beacon at the fact that in the post-COVID era there is a trend of working at home – with all the family situations it encompasses, and in this respect the study constitutes a foundation for further research.

## References

- Assor, A., 2001. Nurturing intrinsic motivation to learn at school. *Hinuch Hahashiva*, 20, pp. 167-190. [in Hebrew]
- Ben-Amram, M. and Davidovitch, N., 2021. School and home as study spaces: Attitudes of teachers, parents, and students to e-learning during the COVID-19 period – The case of Israel. *International Journal of Educational Methodology*, 7(4), pp. 715-731.
- Ben-Amram, M. and Davidovitch, N., 2021. The COVID-19 period: A crisis for on-site learning or an opportunity for optimal distance learning? Examination of student attitudes. *Journal of Education and Learning*, 10(3), pp. 27-38. Canadian Center of Science and Education. Canada.
- Clark, R. C. and Mayer, R. E., 2016. *E-learning and the science of instruction* (4th ed). Hoboken, NJ: Wiley.
- Clark, R. E., 2001. *Learning from media*. Greenwich, CT: Information Age Publishing.
- Cohen, D., 2016. Post-traumatic growth of children following their parents' divorce: A group counseling intervention model. *Hayi'utz Hachinuch*, 19, pp. 65-88. [in Hebrew]
- Dhawan, S., 2020. Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), pp. 5-22.
- Garbe, A., Ogurlu, U., Logan, N., & Cook, P. (2020). Parents' Experiences with Remote Education during COVID-19 School Closures. *American Journal of Qualitative Research*, 4(3), 45–65. <https://doi.org/10.29333/ajqr/8471>
- Goldberg, A. E., Allen, K. R., and Smith, J. Z., 2021. Divorced and separated parents during the COVID-19 pandemic. *Family Process*, 60(2), pp. 866-877. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8444689/>
- Gorev, D., Vaisman, T., and Lauterstein-Pitlik, E., 2018. Motivation to learn and to teach. *Learn how to manage your class: Fourth Part* (Volume edited by D. Gorev and T. Vaisman), pp. 25-31. [in Hebrew]
- Gottfried, A. E., Marcoulides, G. A., Gottfried, A. W. and Oliver, P. H., 2013. Longitudinal pathways from math intrinsic motivation and achievement to math course accomplishments and educational attainment. *Journal of Research on Educational Effectiveness*, 6, pp. 68–92.
- Griffith, A. K., 2020. Parental burnout and child maltreatment during the COVID-19 pandemic. *Journal of Family Violence*, 29(4), pp. 397–408. <https://doi.org/10.1007/s10896-020-00172-2>
- Hald, G. M., Strizzi, J. M., Cipric, A., and Sander, S., 2020. The divorce conflict scale. *Journal of Divorce and Remarriage*, 61, pp. 83–104. <https://doi.org/10.1080/10502556.2019.1627150>
- Karaoglan Yilmaz, F. G., and Yilmaz, R., 2019. The impact of feedback form on transactional distance and critical thinking skills in online discussions. *Innovations in Education and Teaching International*, 57(1), pp. 119-130. <https://doi.org/10.1080/14703297.2019.1612265> 12/9/21
- Karaoglan Yilmaz, F. G., Olpak, Y. Z., and Yilmaz, R., 2018. The effect of the metacognitive support via pedagogical agent on self-regulation skills. *Journal of Educational Computing Research*, 56(2), pp. 159–180. <https://doi.org/10.1177/0735633117707696> 12/9/21
- Klootwijk, C. L., Koele, I. J., van Hoorn, J., Güroğlu, B., and van Duijvenvoorde, A. C., 2021. Parental support and positive mood buffer adolescents' academic motivation during the COVID-19 pandemic. *Journal of Research on Adolescence*, 31(3), pp. 780-795.
- Koçak, O., Koçak, Ö. E., and Younis, M. Z., 2021. The psychological consequences of COVID-19 fear and the moderator effects of individuals' underlying illness and witnessing infected friends and family. *International Journal of Environmental Research and Public Health*, 18(4), p. 1836.
- Kocak E., Kinaci H., Shehzad K. (2021). Environmental efficiency of disaggregated energy R & D expenditures in OECD: a bootstrap DEA approach. *Environ. Sci. Pollut. Res.*, 28 (2021), pp. 19381-19390
- Kusurkar, R. A., Ten Cate, T. J., Vos, C. M. P., Westers, P., and Croiset, G., 2013. How motivation affects academic performance: A structural equation modelling analysis. *Advances in Health Sciences Education*, 18, pp. 57-69.
- Levy-Shiff, R., 2018. Short- and long-term effects of divorce on children. *Psychoactaliya* (April 2018), pp. 15-27. [in Hebrew]
- Majadla, S., 2015. The coping of children with divorced parents in the Arab educational system in mixed families of Arab-Israeli citizens and Palestinians from the territories. *Psychoactaliya* (April 2015), pp. 15-19. [in Hebrew]
- McCarthy, K., 2020, March 7. The global impact of coronavirus on education. Retrieved from ABC News: <https://abcnews.go.com/International/global-impact-coronaviruseducation/story> 12/9/21
- Meeter M, Bele T, den Hartogh C, Bakker T, de Vries RE, and Plak S. College students' motivation and study results after COVID-19 stay-at-home orders. 2020. doi:10.31234/osf.io/kn6v9
- Motro, M., Shternlicht, O., and Guberman, A., 2011. "Exploring animal behaviors" as means to nurture scientifically acceptable working methods and biological conceptualizations in the early childhood. *Bema'agley Hinuch: Mehkar, Iyun Veyetzira*, 1, pp. 105-120. [in Hebrew]
- Nusinovici, S., Olliac, B., Flamant, C., Müller, J. B., Olivier, M., Rouger, V., ... and Hanf, M., 2018. Impact of parental separation or divorce on school performance in preterm children: A population-based study. *PLoS one*, 13(9), p. e0202080.

- Raley, R. K., and Sweeney, M. M., 2020. Divorce, repartnering, and stepfamilies: A decade in review. *Journal of Marriage and Family*, 82(1), pp. 81–99. <https://doi.org/10.1111/jomf.12651>
- Ritonga, R., and Ramadhani, S. P., 2020. Survey of student motivation in online learning During the Covid-19 pandemic. *Journal of Social Science and Humanities*, 3(6), pp. 10-17.
- Sahithya, B. R., Rithvik S. Kashyap, and Roopesh, B. N., 2020. Perceived stress, parental stress, and parenting during COVID19 lockdown: A preliminary study. *Journal of Indian Association for Child and Adolescent Mental Health*, 16, pp. 44–63.
- Song, L., Singleton, E. S., Hill, J. R., and Koh, M. H., 2004. Improving online learning: Student perceptions of useful and challenging characteristics. *The Internet and Higher Education*, 7(1), pp. 59–70.
- Vedder-Weiss, D., 2013. Is adolescents' declining motivation to learn inevitable? *Hachinuch Usvivo: Annual of the Kibbutzim Seminar*, 35, pp. 43-54. [in Hebrew]
- Yariv, E., 2018. Class management for increasing motivation. *Class management* (Volume edited by E. Yariv and D. Gorev), pp. 229-245. [in Hebrew]