IJQE

International Journal of Quality in Education

Online, https://dergipark.org.tr/tr/pub/ijqe

Volume: 8(1), 2024

e-ISSN:2636-8412

IMPACT OF TEACHERS' EMOTIONAL INTELLIGENCE, PSYCHOLOGICAL WELL-BEING, EFFICACY ON YOUNG CHILDREN'S EMOTIONAL AND ACADEMIC SCHOOL READINESS

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Abstract: *The purpose of the study was to examine impact of early childhood teachers' emotional intelligence, efficacy and psychological well-being levels on children's academic and socio-emotional school readiness. Thirty-six teachers from twenty different kindergartens and 95 children (students) participated the study. The findings revealed the direct positive impact of teacher psychological well-being, and emotional intelligence on young children's academic school readiness. Teachers' psychological well-being played mediator role between teacher efficacy and children's academic school readiness. Teacher efficacy and psychological well-being had a direct effect on young children's social-emotional school readiness. Teacher's emotional intelligence was not a significant predictor of children's social-emotional school readiness. Although teacher efficacy, emotional intelligence and psychological well-being was related to each other only for academic school readiness teacher efficacy mediated by psychological well-being in other cases they acted independently.*

Key Words*: academic school readiness, social-emotional school readiness, teacher efficacy, emotional intelligence, psychological-well-being.*

Introduction

In democratic societies equal opportunity for education accepted as a right for everyone. For decades, school readiness has been one of the most intriguing subject for early childhood educators, policy makers and society at large because school readiness seem as a tool to achieve equal opportunity for education for all children (Ellsworth & Ames, 1998). Plethora of studies documented the positive impact of school readiness on children's academic achievement (Aygün, 2019; Hair et al., 2006; Ramey & Ramey, 2004; Unutkan, 2006)**;** social-emotional development *(*Denham, 2006; Levenstein et al., 2002; Schwartz & Davis, 2006) and school adaptation (Çökük, 2020). Recently Pianta et. al. (2020) conducted a comprehensive study with 126 teachers and 1498 children. They investigated the impact of teacher-student interactions and teacher practices on children's school readiness. Their findings emphasized children's skills and abilities as they entered the school as the most important determinant of children's academic success. Since school readiness is such an important concept it is reasonable to investigate factors that have an impact on school readiness.

Plethora of studies have revealed the crucial role that early childhood teachers played in children's academic advancement (Croninger et al., 2007; Kiuru et al., 2012**;** NICHD, 2002; Pianta et al., 2020) and social-emotional development (Denham et al., 2012; Mashburn et al., 2008). Therefore, we thought it is reasonable to investigate impact of early childhood teachers' emotional intelligence, psychological well-being and

teaching efficacy levels on children's academic and social school readiness for elementary school.

For the purpose of this study we recruited more traditional definition of school readiness. Accordingly, we defined school readiness as having sufficient academic and social skills to most effectively benefit from elementary education (Crnic & Lamberty, 1994; Sandilos et al., 2019). Academic readiness contains mathematic skills such as counting, matching, simple addition and subtraction, figuring out patterns, science related skills such as naming concepts, making inferences, phonemic awareness and fine motor skills and literacy related skills such as phonemic awareness (Kotaman, 2014; Marti et al., 2018). Studies revealed that children who were better on these skills compared to their peers showed advanced academic achievement (Pianta et al., 2020; Sandilos, et al., 2019). Social-emotional readiness involves skills such as ability to tell feelings, understanding others' feelings, cooperating, taking responsibility, taking initiative (Petrides et al., 2004). Several studies have shown positive impact of socio-emotional skills on school adjustment, academic achievement and psychological health of children (Bennett et al., 2005; Goble et al., 2019; Petrides et al., 2004; Russo et al., 2011).

Teacher Efficacy

Bandura (1997) emphasized domain specific nature of self-efficacy beliefs and therefore he mentioned teachers' teaching efficacy as a specific case of self-efficacy. Teaching efficacy definition of Skaalvik and Skaalvik (2010) compromised with Bandura's explanation. Therefore, for the purposes of this study we recruited following definition of teachers' teacher efficacy "…individual teachers' belief in their own ability to plan,

organize, and carry out activities that are required to attain given educational goals (Skaalvik & Skaalvik, 2010, p. 1059)." Student engagement, efficacy for instructional strategies and classroom management are three dimensions of teaching efficacy (Tschannen-Moran et al., 1998).

Throughout decades teaching efficacy have been found to be related with effective teacher behavior such as willingness to implement new instructional ideas (Gaith & Yaghi, 1997), promoting learning of slow students (Shachar & Shmuelevitz, 1997), showing enthusiasm for professional and personal improvement (Muijs & Reynold, 2002) and using less interventionist and more democratic classroom management methods (Gencer & Cakiroglu, 2007; Sandholtz & Ringstaff, 2014). In a recent study Brown et al. (2021) have found that pre-service teachers' teaching efficacy had indirect impact on their teaching performance through their feeling of preparedness.

Beside these positive impacts on teachers' aspects, several studies documented the positive impact of teaching efficacy on students' motivation (Midgley et al., 1989) and academic achievement (Shidler, 2009; Goddard et al., 2000; Salgado et al., 2018) even when prior achievement and background factors were controlled (Muijs & Reynold, 2002). For example, Cantrell, et al., (2013) investigated impact of teaching efficacy on middle and high school students' reading comprehension and overall reading achievement. They have found that teachers' teaching efficacy was positively related to students' reading comprehension and overall reading achievement. In another study Salgado, et. al. (2018) investigated the impact of eighth grade science teachers' teaching efficacy on students' academic achievement. Their findings revealed teacher efficacy as a significant predictor of student achievement. All these studies indicated teaching efficacy as a critical factor for teacher improvement and student achievement. However,

most of these studies targeted elementary school and higher to the authors knowledge no study had investigated the impact of early childhood teachers' teaching efficacy on children's school readiness. In relationship with other variables that have potential impact on young children school readiness this study aims to fill this gap.

Teachers' Emotional Intelligence and School Readiness

Similar to self-efficacy in last two-decade emotional intelligence also have attracted a lot of attention in social sciences. Several studies revealed association between emotional intelligence and teaching efficacy **(**Chan, 2008; Koçoğlu, 2011**)**. Emotional intelligence can be defined as a person's ability to perceive own emotions, understanding others' emotions and regulating emotions (Mayes et al., 2004; Mayes et al., 2000). For the purposes of this study we have conceptualized emotional intelligence (EI) as teachers' perception about their ability to understand their own emotions, understanding of others' emotions and regulating their emotions (Salovey & Mayer, 1990). In the current study we measure teachers' perceptions about the awareness of their own emotions, understanding capacity of others' emotions and ability to regulate emotional situations.

Teaching is a profession that require constant interaction with children, families and colleagues. Therefore, including their own, teachers have to be aware of emotions and able to manage them (Kotaman, 2016). Studies revealed significant positive influence of emotional intelligence on reducing teachers' burnout (Brackett et al., 2010; Chan, 2006; Ju et al., 2015; Merida-Lopez & Extremera, 2017) and increasing teachers' job satisfaction (Plastsidou, 2010); teaching efficacy (Koçoğlu, 2011), teaching perfor-

mance (Ghanizadeh & Moafian, 2010) and students' achievement (Alam & Ahmed, 2018; Eren et al., 2009).

Ghanizadeh and Moafian (2010) found significant positive association between English teachers' success and their trait emotional intelligence. Emotional intelligence was predictor of teachers' success. Emotional intelligence explains 15% of the variations in teachers' success (Ghanizadeh & Moafian, 2010). Curci et al., (2014) investigated impact of teachers' emotional state, teaching efficacy, emotional intelligence; students' self-esteem, metacognitive beliefs, self-report abilities on students' mathematic achievement with 12 junior high mathematic teachers and their 338 students. Their modeling revealed that among teacher characteristics, only EI abilities were significant predictor of students' mathematic achievement. They concluded that teachers' EI contributed to students' mathematic achievement by enhancing the positive effects of students' self-perceptions of ability and self-esteem (Curci et al., 2014). In a more recent experimental study Pozo-Rico and Sandoval (2021) tested impact of emotional intelligence program that were developed to increase teachers' emotional intelligence on their students' achievement. Their sample consisted of seventy-four primary education teachers and their 2069 students. They found significant difference between treatment group and control group in favor of treatment group which was to say academic achievement of students of teachers with emotional intelligence training were higher than their peers whose teachers did not attain to emotional intelligence course. Goble, et al. (2019) conducted a large study with 1179 young children (mean age 4,18 years) they have found that teachers' appropriate emotional support increased young children's executive functioning skills.

These studies emphasized role of teachers' emotional skills in education and students' achievement and again just like teacher efficacy to the authors' knowledge no study investigated the phenomenon related to early childhood children school readiness. Early childhood teachers especially should be aware of the importance of attending to the emotive states of students, since children's emotive knowledge expands during the early years of their lives (Bee, 1999). In this study we aimed to reach evidence for the direct and indirect impact of early childhood teachers' emotional skills on their students' academic and social school readiness.

Psychological Well-Being

Compare to teacher efficacy and emotional intelligence psychological well-being is more recent concept in educational settings. Our operational definition for psychological well-being is following: Psychological well-being is personal state of mind in which person hold optimist and hopeful future perspective which provide enough motivation to create purposeful and meaningful life away from destructive general stress, depression and professional emotional exhaustions (Cansoy et al., 2020; Jeon et al., 2018). Teachers' psychological well-being has been found to be related with the quality of teacher-student interaction (Koles et al., 2013; Whitaker et al., 2015); students' social and emotional development (Zinsser et al., 2013) and teachers' classroom management skills (Sandilos et al., 2019).

Several studies revealed positive association between teachers' efficacy and psychological well-being (Cansoy et al., 2020; Jeon et al., 2018). In a recent study that Cansoy, et al. (2020) conducted with 412 teachers from different branches have pointed

teacher efficacy as a significant predictor of teachers' psychological well-being. Psychological well-being and teaching efficacy appeared as related concepts. Therefore, we find it reasonable to examine these concepts concurrently.

On the other hand, in their recent study Kamboj and Garg (2021) pointed positive impact of teachers' emotional skills on their psychological well-being. In summary, studies have shown the impact of teacher efficacy, teachers' emotional intelligence and psychological well-being on their students' academic and social development. Studies also revealed interactions and associations among these concepts. Therefore, by modeling these concepts we aimed to reach fuller picture of the phenomenon. Thus, when we plan educations for prospective and working early childhood teachers we can be more efficient because it will be easier for teacher educator to determine and list priorities of the education.

In summary purpose of this research is to investigate impact of early childhood teachers' emotional intelligence, efficacy and psychological well-being levels on their children's academic and socio-emotional school readiness. We also aimed to come up with a model that exhibited interactions among above mentioned teacher variables and their direct and indirect impact on children's variables.

Accordingly, we targeted following research questions:

1. Do teacher variables (emotional intelligence, efficacy, psychological well-being) have impact on children's academic school readiness?
2. Do teacher variables (emotional intelligence, efficacy, psychological well-being) have impact on children's socio-emotional school readiness?

3. How does interaction among teacher variables effect children's academic and socio-emotional school readiness?

Research Methodology

The study was conducted with the permission of XXX University, XXXX, Turkey. Permission dates and protocol numbers for XXX University, XXXX, Turkey were 27.08.2021-E.4737298-44-30318984. Some of the research data came from a larger experimental study.

Participants

Thirty-six teachers from twenty different kindergartens and their 95 children (students) participated the study. Originally, 98 children accepted to participate the study however during the measurement phase three of them did not want to complete the process. Therefore, we discarded them from the study. All the teachers were female. The ages of the teachers ranged from 22 to 35, with a mean age of 26 (SD= 2.57). Participants' years of education, years of professional education and years of experience ranged from 14 to 19, 2 to 9, and 1 to 10, with mean years of 16.1 (SD = 0.79), 4.49 (SD = 1.47) and 2.62 (SD = 1.43), respectively.

Table 1
Teacher Demographics

	Min	Max	Mean	Std.
Age	22	35	26	2.57
Years of Education	14	19	16.1	0.79
Years of Professional Education	2	9	4.49	1.47
Seniority	1	10	2.62	1.43

Of the 95 five children, 49 (51.6%) were girls and 46 (48.4%) were boys. Their ages ranged from 55 (4-years) to 77 (6 years) months, with a mean age of 66.67 (5

Years) months (SD = 4.17). Table 2 demonstrates the demographic characteristics of children and their families. According to the Turkish Statistical Institute (an official government organization), the monthly per capita income in Turkey is approximately 771$ (TUİK, 2018). The average time of schooling in Turkey is 6.5 years (Berkan, 2013). We can say that most of the participants came from socio-economically disadvantaged families.

Table 2
Demographics of participating children and their parents

Boys	Girls	Mean Age Month	Std. Age	Mean Father Education Year	Mean Mother Education Year	Mean Income ($) Per Month
46	49	66.67	4.17	8.62	7.06	560.12

Instruments

Marmara University School Readiness for Elementary School Test

Children's academic and social school readiness was measured with Marmara University School Readiness for Elementary School Test which developed by Polat (2007). Academic section of the test contains five sub tests. Mathematics, science, phonemes, drawing, labyrinth sub tests contain 47, 14, 8, 6 and two questions respectively. Test kit also contains 40 item likert type social development scale which measure children's social development. Teachers responded this 40 item scale. Each item can be evaluated between 1 (lowest) and 4 (highest) points. High scores from this scale indicate high social school readiness. Cronbach alpha coefficients for the scale was 0.97. This Cronbach's coefficient is considered indicative of sound reliability (Issac & Michael, 1995).

Teacher Sense of Efficacy Scale

Teachers' teaching efficacy was measured with the Turkish version of Teacher Sense of Efficacy Scale (TTSES). The scale was adapted into Turkish by Çapa, Çakıroğlu and Sarıkaya (2005). The scale contains 24 items and three sub scales, these are: student engagement (SE), instructional strategies (IS) and classroom management (CM). Cronbach alpha coefficients for SE, IS and CM were 0.93, 0.94 and 0.92 respectively. These Cronbach's coefficients are considered indicative of sound reliability for education (Issac & Michael, 1995). Responses ranged from 1 (Nothing) to 9 (A great deal). High scores on every subscale indicated higher levels of teaching efficacy. Participants could receive a minimum score of 8 and a maximum score of 72 on each subscale.

Schutte Self-Report Emotional Intelligence Test

Teachers' emotional intelligence was measured with the Turkish version of the Schutte Self-Report Emotional Intelligence Test. The test was adapted into Turkish by Tatar, Tok, Saltukoğlu (2011). The test contains 41 items divided into three subscales: perceiving emotions (PE), utilization of emotions (UE), evaluation of emotions (EE) and total. Cronbach alpha coefficients for PE, UE, EE and total were 0.61, 0.24, 0.77, 0.82 respectively. Thirteen items are not included in sub scales however they are included in whole test score therefore the test provides four different types of scores. Except utilization of emotions sub scale these Cronbach's coefficient is considered acceptable reliability for education (Issac & Michael, 1995). Participants could respond each item between 1 (I do not agree at all) and 5 (I strongly agree). Lowest and highest

scores can be obtained from the scale are 41 and 205 respectively. High scores indicate positive (PE), (UE) and (EE).

Warwick-Edinburg Mental Wellbeing Scale

Teachers psychological well-being was measured with the Turkish version of the Warwick-Edinburg Mental Wellbeing Scale. The scale was adapted into Turkish by Keldal (2015). The scale contained 14 items and it does not have any sub scales. Participants could respond each item between 1 (I do not agree at all) and 5 (I strongly agree). Lowest and highest scores can be obtained from the scale are 14 and 70 respectively. High scores indicate positive psychological well-being. For the current study, Cronbach's alpha coefficient was 0.86. This Cronbach's coefficient is considered indicative of sound reliability for education (Issac & Michael, 1995).

Procedure and Materials

The investigators informed the kindergarten administration and the teachers about the study. After the administrator and the teachers agreed to participate in the study, the teachers informed parents about the study and asked them to sign a consent letter and fill in a demographic questionnaire. After the consent letters were received, the investigator and the research assistants who were unaware of the purpose of the study began to visit the kindergartens to gather data. Research assistant applied academic part of the Marmara University School Readiness for Elementary School Test each child individually in an available room of the school. As it was mentioned before, teachers responded to social development scale of children. Teachers also responded to efficacy, psychological well-being and emotional intelligence scales.

Results

Multiple regression analysis was utilized to answer each research question, and the results of the statistical analyses were highlighted and presented. The results of the study have three parts.

First, we examined direct impacts of teacher efficacy (TE), teacher emotional intelligence (TEI) and teacher psychological wellbeing (PW) to children's academic school readiness (ASR) and children's social-emotional school readiness (SESR). Further, we examined the relation between teacher efficacy and teacher psychological wellbeing and their effect on both children's academic school readiness and social-emotional school readiness. We investigated the role of teacher psychological well-being in this construct as a mediator between teacher efficacy, which is observed by three factors (instructional strategies, management, and student engagement) and children's academic readiness and social-emotional readiness. We also, investigated the role of teacher psychological wellbeing in this construct as a mediator between teacher emotional intelligence, which is observed by three factors (perceiving emotions, utilization of emotions, evaluation of emotions and emotions total) and children's academic readiness and social-emotional readiness. Means, and standard deviations of dependent variables are given in Table 3.

Table 3

Descriptive statistics of the variables with factors

Variables	Mean	Std. Deviation	N
Instructional strategies	56.43	7.27	36
Classroom management	64.18	8.23	36
Student engagement	49.52	6.83	36
Psychological wellbeing	55.82	5.49	36
Teacher emotional intelligence	163.54	12.04	36
Teacher perceiving emotions	23.29	2.38	36
Teacher utilization of emotions	48.33	3.95	36
Teacher evaluation of emotions	39.95	5.64	36
Children academic school readiness	31.26	14.68	36
Children social-emotional school readiness	117.72	24.53	36

Direct Impacts on the Proposed Model

Throughout the analysis, both the education level and the income of families were controlled. Further, effects of the teacher related variables were analyzed one at a time while the other variables controlled. First, effect of teacher efficacy on children's academic and social-emotional readiness was analyzed. The results showed a significant relationship between teacher's efficacy both with children's academic and social-emotional readiness. The weights of the regression coefficients showed that the effect of the classroom management was higher than the instructional strategies and student engagement respectively. Table 4 shows the results of the relationship between teacher efficacy on children related variables.

Table 4

Teacher efficacy effect on children's readiness

Variables	Mean Square	B	Std. Error	t	F	Sig.
Academic Readiness	381.983	.619	.756	3.045	2.133	.013
Social-Emotional Readiness	992.924	.755	.484	2.817	1.925	.028

Second, effect of teacher emotional intelligence (TEI) on children's academic and social-emotional readiness was analyzed. The results showed a significant relationship between TEI and children academic readiness but not with children social-emotional readiness. The weights of the regression coefficients showed that the effect of the use of emotions was higher than the Emotional Edit and Emotional Evaluation respectively. Table 5 shows the results of the relationship between Teacher Emotional Intelligent on children related variables.

Table 5
Teacher emotional intelligence effect on children's readiness

Variables	Mean Square	B	Std. Error	T	F	Sig.
Academic Readiness	369.631	1.048	.439	2.913	2.228	.005
Social-Emotional Readiness	1014.323	.223	.734	.628	2.164	.532

Third, effect of teacher psychological wellbeing (PW) on children's academic and social-emotional readiness was analyzed. The results showed a significant relationship between PW with both children's academic and social-emotional readiness. To conclude, both teacher efficacy and teacher emotional intelligence had a significant relationship with children's academic and social-emotional readiness. Teacher efficacy also had a significant relationship with social-emotional readiness. On the other hand, teacher emotional intelligence had no significant effect on social-emotional readiness.

Indirect Impacts with Mediations on the Proposed Model

The psychological wellbeing was one factor measure, however the relation of it between the factors of the teacher efficacy and teacher emotional intelligent was high respectively ($r = .787$, $p = .000$; $r = .623$, $p = .000$). Therefore, we tested if psychologi-

cal wellbeing was a mediator between teacher variables and children variables. Table 6 shows the results of the relationship between teacher psychological well-being on children related variables.

Table 6
Teacher psychological wellbeing effect on children's features

Variables	Mean Square	B	Std. Error	t	F	Sig.
Academic Readiness	478.906	.345	.439	2.254	3.311	.000
Social-Emotional Readiness	885.604	.286	.734	2.256	1.985	.036

Following, we test effects of teacher efficacy on children academic and social-emotional readiness with testing teacher psychological wellbeing as a mediator. The models and results are given in Table 5 and 6 respectively. The model results indicate that path-a, and path-b were significant for children academic and social-emotional readiness. It implies that both children academic and social-emotional readiness associate with teacher psychological wellbeing and teacher efficacy combined was effective ($B_1 = 0.18$, $t_1 = 2.42$, $p = .018$; $B_2 = 0.12$, $t_2 = 2.23$, $p = .013$). Following, teacher psychological wellbeing was positively associated with teacher efficacy ($B = 1.32$, $t = 3.67$, $p = .001$), and also children social-emotional readiness was positively associated with teacher efficacy ($B = 1.92$, $t = 3.76$, $p = .001$). However, children academic readiness was not associated with teacher efficacy ($B = 0.68$, $t = 0.60$, $p = 0.550$). That means path-c in the model was not significant.

Therefore, we could conclude that teacher efficacy had a significant effect on children's academic readiness indirectly; only when teacher psychological wellbeing was meditating. All the other effects such as teacher efficacy on children social-

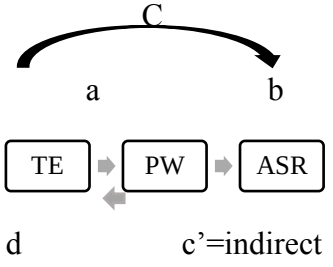
emotional readiness, and teacher psychological wellbeing on both of the children readiness were directly significant.

Mediation analysis was test using the bootstrapping method with bias corrected estimates (MacKinnon et al., 2002). The %95 confidence interval of indirect effect was obtained with 5000 bootstap resamples. Results of the mediation analysis confirmed the mediating role of teacher psychological wellbeing in relation between children academic readiness and teacher efficacy (B-B_1=1.24, CI=[1.04, 1.44]).

Following, we test effects of teacher emotional intelligence on children academic readiness with teacher psychological wellbeing as a mediator. The models and results are given in Table 7 and 8 respectively.

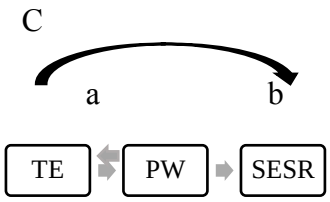
Table 7

Mediation analysis with PW for TE

Model	Analysis	Paths	Graphical design
1	$ASR = B_0 + B_1(TE) + B_2(PW) + \epsilon$	b & c	
2	$ASR = B_0 + B(TE) + e$	C	
3	$PW = B_0 + B(TE) + e$	A	
4	$TE = B_0 + B(PW) + e$	D	
5	$B_{indirect} = B - B_1$	c'	

Kotaman, H. & Evran, D. (2024). **impact of teachers' emotional intelligence, psychological well-being, efficacy on young children's emotional and academic school readiness.,** *International Journal of Quality in Education*

1	$SESR = B_0 + B_1(TE) + B_2(PW) +$	b & c
2	$SESR = B_0 + B(TE) + e$	C
3	$PW = B_0 + B(TE) + e$	A
4	$TE = B_0 + B(PW) + e$	D
5	$B_{indirect} = B - B_1$	c'



c'=indirect

d

*(ASR=Children's Academic School Readiness, SESR=Children's Social-Emotional School Readiness, TE=Teacher Efficacy, PW=Teacher Psychological Wellbeing)

Table 8

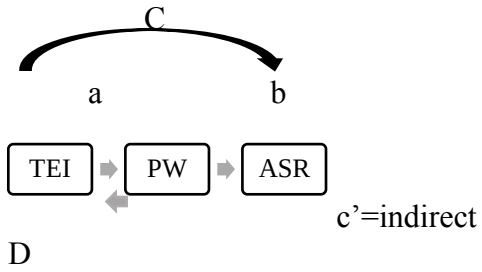
Mediation analysis results with PW for TE

Model		B	Std. error	Beta	T	Sig.	Coefficients
1	Intercept	2.515	1.115		2.352	.026	$ASR = 2.47 + 0.18^{*}\ TE + 0.13^{*}\ PW$
	TE	0.156	0.076	0.184	2.420	.018	
	PW	0.058	0.022	0.129	2.238	.013	
2	Intercept	3.922	1.057		3.711	.001	$ASR = 3.26 + 0.68\ TE$
	TE	0.052	0.070	0.682	0.604	.550	
3	Intercept	2.298	7.368		3.298	**.**003	$PW = 2.00 + 1.32^{*}\ TE$
	TE	1.794	0.486	1.326	3.672	.001	
4	Intercept	5.759	2.232		2.580	**.**024	$TE = 5.76 + 0.17^{*}\ PW$
	PW	0.150	0.041	0.179	3.672	.001	

The model results indicate that path-a, and path-b were significant for children academic readiness. It implies that we can conclude children academic readiness association with teacher psychological wellbeing and teacher emotional intelligence combined was effective ($B_1 = 0.12$, $t_1 = 2.17$, $p = .042$; $B_2 = 0.12$, $t_2 = 2.23$, $p = .013$). Following, teacher psychological wellbeing was positively associated with teacher emotional intelligence ($B = 1.72$, $t = 3.92$, $p = .003$) and also with children's academic readiness ($B = 1.86$, $t = 3.56$, $p = 0.05$).

Table 9

Mediation analysis with PW for TEI

Model	Analysis	Paths	Graphical design
1	$ASR = B_0 + B_1(TEI) + B_2(PW) + e$	b & c	
2	$ASR = B_0 + B(TEI) + e$	c	
3	$PW = B_0 + B(TEI) + e$	a	
4	$TEI = B_0 + B(PW) + e$	d	
5	$B_{indirect} = B - B_1$	c'	

*(ASR=Children's Academic Achievement, TEI=Teacher Emotional Intelligence, PW=Teacher Psychological Wellbeing)

Table 10

Mediation analysis results with PW for TEI

Model		B	Std. error	Beta	T	Sig.	Coefficients
1	Intercept	4.347	0.966		2.234	.034	$ASR = 4.13 + 0.12^{*}\,TEI + 0.12^{*}\,PW$
	TEI	1.647	1.645	0.126	2.239	**.013**	
	PW	1.788	1.345	0.123	2.174	**.042**	
2	Intercept	3.922	0.572		3.671	.003	$ASR = 3.96 + 1.72^{*}\,TEI$
	TEI	2.072	0.936	0.174	3.927	**.003**	
3	Intercept	3.635	1.347		3.289	**.**002	$PW = 3.65 + 0.26\,TEI$
	TEI	1.296	0.563	0.264	2.832	**.**250	
4	Intercept	2.586	1.276		2.935	**.**012	$TEI = 2.86 + 0.15\,PW$
	PW	1.403	0.256	0.159	2.462	.624	

Figure 1

Proposed model final results for TE with mediating PW on ASR

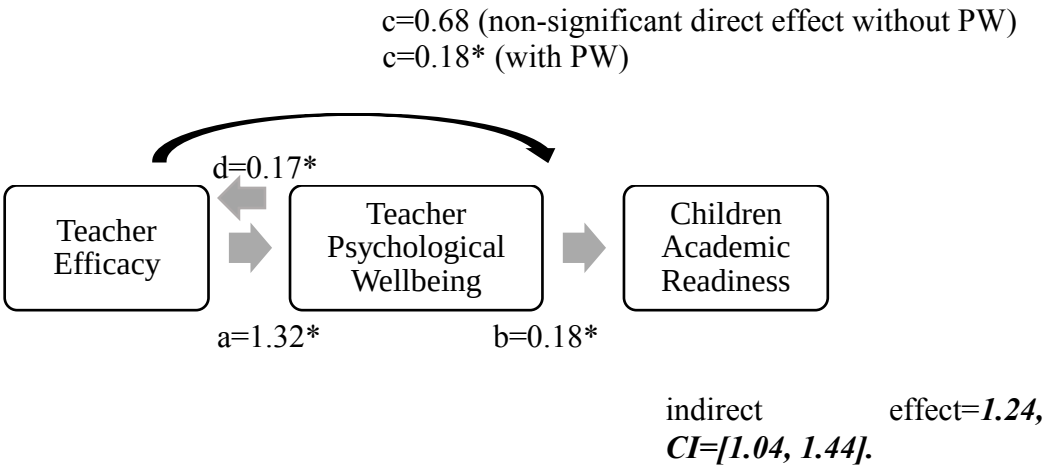
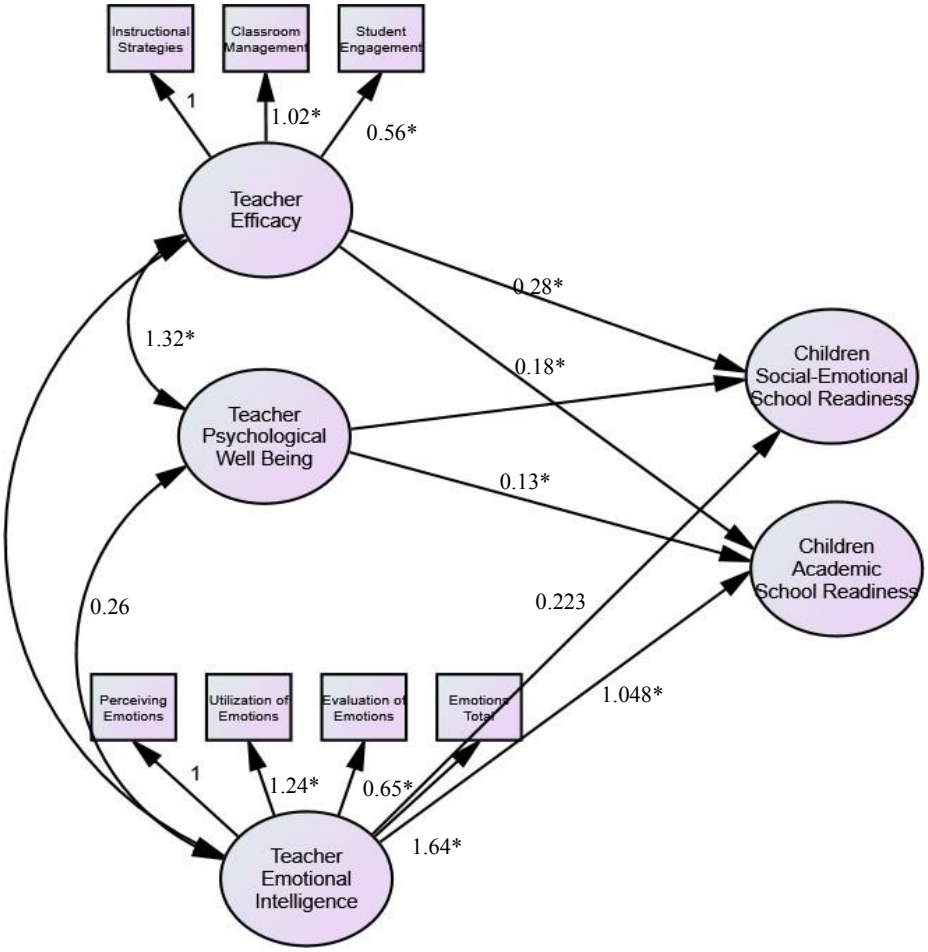


Figure 2

Diagram Representing the Model



Therefore, we could conclude that teacher emotional intelligence had a significant effect on children academic readiness directly, and teacher's psychological wellbeing was not meditating.

Discussion

The purpose of the study was to examine impact of early childhood teachers' emotional intelligence, teacher efficacy and psychological wellbeing on children's academic and social school readiness for elementary school. Through investigating relationships among these variables we tried to come up with a model that would provide

better understanding for mechanism lying under the influence of early childhood teachers on children's academic and socio-emotional school readiness.

Our final model revealed direct effect of teachers' psychological well-being's on young children's academic and social-emotional school readiness and psychological well-being also worked as mediator between teacher efficacy and children's academic school readiness. Therefore, when we controlled for teachers' psychological well-being teacher efficacy was not significantly effective on children's academic school readiness. Positive impact of early childhood teachers' psychological well-being on young children's social-emotional development previously documented by Zinsser et al. (2013). In that sense our findings on teachers' psychological well-being and children's social-emotional school readiness were consistent with previous literature.

The current study extended previous research in several ways. First, we have documented direct impact of teachers' psychological well-being on young children's academic school readiness by measuring early childhood children's academic school readiness with a standardize test. Although many studies investigated relation between students' well-being and their academic achievement (Amholt et al., 2020), to the authors knowledge this is the only study provide evidence for the association between early childhood teacher psychological well-being and young children's academic achievement.

Although many studies revealed positive impact of teacher efficacy on students' academic achievement (Cantrell et al., 2013; Goddard et al., 2000; Salgado et al., 2018; Shidler, 2009) our new model showed that for young children's academic school readiness teacher efficacy worked through teachers' psychological well-being. This finding was not surprising when we considered the studies that pointed positive association be-

tween teachers' efficacy and psychological well-being (Cansoy et al., 2020; Jeon et al., 2018). For example, Jeon et al., (2018) conducted a study with 1129 early childhood teachers. They have found strong positive correlation between early childhood teachers' teaching efficacy and their psychological well-being. We have also detected significant association between these two concepts. Jeon et al. (2018) emphasized that teachers who believed they can make a difference by teaching and teachers with higher teaching efficacy experienced less depression and less destructive stress compared to teachers with low teaching efficacy. Our model showed that this relationship had predictive impact on young children's academic school readiness. Conceptually teacher efficacy is a belief about teachers' own future performance (Bandura, 1997) and efficacy found to be a primary cause of feelings of self-worth and perceived usefulness (Pajares & Miller, 1994). Therefore, teachers who have optimistic perception about their performance might have higher teacher efficacy and psychological well-being of the teachers might have fed this optimism because conceptually it is related to self-acceptance, autonomy and personal growth (Martel & Santana, 2021). In return this process might have created a positive reciprocal circle. Since teacher efficacy is related to teachers' professional commitment (Ware & Kitsantas, 2007) and higher job satisfaction (Dağlı & Kalkan, 2021; Skaalvik & Skaalvik, 2017) these factors might have had positive influence on teachers' psychological well-being which in return might have had enhancing effect on their performance thus their students' academic school readiness might have had increased.

Our findings revealed direct impact of teacher efficacy and on children's emotional school readiness. As it was mentioned before, teacher efficacy has been found

associated with using less interventionist and more democratic classroom management methods (Gencer & Cakiroglu, 2007; Sandholtz & Ringstaff, 2014). Democratic classroom allows children to express their feelings without fear of embarrassment and punishment and communicate with teacher effectively (Mcnally & Slutsky, 2018; McLennan, 2009) such quality interaction between teacher and child promoted children's social-emotional development (Brunchinal, et al., 2010). This maybe one explanation for direct impact of teacher efficacy on young children's social-emotional development.

Our regression analysis pointed teachers' emotional intelligence as a predictor of young children's academic school readiness. This finding was consistent with previous studies (Curci et al., 2014; Pozo-Rico & Sandoval, 2021) our findings extended impact of teachers' emotional intelligence on students' academic achievement for young children. Teachers' emotional intelligence act alone on this manner, it did not act in collaboration with teacher efficacy and/or teacher psychological well-being. To the authors' knowledge only Bechter et al. (2021) investigated relation between teachers' emotional intelligence and their teaching motivation. They conducted their study with high school physical education teachers and they found significant indirect effect of teachers' emotional intelligence on teachers' intrinsic teaching motivation. Emotional intelligence might have increased motivation and thus in return it might have contributed early childhood teachers' teaching performance.

Our regression analysis did not reveal teachers' emotional intelligence as an indicator for children's social-emotional readiness. Since emotional intelligence contains emotional skills such as regulating emotional situations, own emotions and recognizing others emotions we expected these skills would have positive effect on children's social-emotional school readiness (Kotaman, 2016) however that was not the case. Educa-

tors very well know that knowing something and teaching it are two different things. Therefore, mastering emotional intelligence skills do not guarantee for early childhood teachers to teach these skills to the children in their classrooms. This might have been the reason for our finding.

As a result, it appears that increasing teachers' psychological well-being, and emotional intelligence levels might have positive effects on young children academic school readiness. Policy makers and other component of education such as parents, industry, business should focus on measures that will increase teachers' psychological well-being such as less students, more communication channels, realistic expectations (Kotaman, 2016). Beside teachers' psychological well-being, interventions that support development of teacher efficacy such as support groups, in-service trainings (Kotaman, 2008) can contribute to children's social-emotional school readiness.

Future Studies and Limitation

Especially findings on early childhood teachers' emotional intelligence need further investigation. Future studies can focus on association between early childhood teachers' emotional intelligence and teaching motivation and their impact on young children's outcomes. Additional, future studies can further examine relationship between early childhood teachers' emotional intelligence and young children's social-emotional development. Improving early childhood teachers' emotional intelligence alone might not be enough to improve their children's (students') social-emotional development. Beside the emotional intelligence skills early childhood teacher might have needed instructional skills and practices that support teaching social-emotional skills to young children.

There are several limitations of this study. First of all, teachers' variables were measured through self-report scales. Therefore, they are subject to social desirability bias. This was also true for children's social-emotional readiness scores because teachers filled these for their own students. Since the study is not an experimental study it does not allow us to make causal inferences. Future studies can focus on experimental studies in which teacher in training group receive education to improve their psychological well-being and emotional intelligence and teacher in control receive no education. Their children's results can be compared with pre and posttests thus causal effects can be obtained.

In addition, sample size of the study was small and may make it difficult to determine if a particular outcome is a true finding. However, Khamis and Kepler (2010) suggested that for all multiple regression models, the least sample size should be determined by number of predictor variables criterion formula; (n=20 + 5k), where ***k*** represents the number of independent variables. For instance, a study with a total of 3 predictor variables, such as our study, a minimum sample of 35 participants was required (Khamis & Kepler, 2010).

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