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Investigating Teachers' Competitive Attitudes and Trust in Co-workers within the Crabs in the Barrel Syndrome Framework: An Explanatory Sequential Mixed-Methods Study

Semih Çayak
Marmara University, Atatürk Faculty of Education, Department of Educational Sciences, İstanbul, Türkiye
ORCID: 0000-0003-4360-4288

Özge Erduran Tekin
National Defense University, Air Force Academy, Department of Educational Sciences, İstanbul, Türkiye
ORCID: 0000-0002-4052-1914

Merve Aydın *
Marmara University, Institute of Education Sciences, İstanbul, Türkiye,
ORCID: 0000-0001-9216-3410

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This study aims to examine the mediating role of Crabs in the Barrel Syndrome in the relationship between teachers' competitive attitudes and trust in co-workers. The sample of the study consists of 464 teachers selected using the convenience sampling method. The Teacher Competitiveness Scale, Trust in Co-workers Scale, Crabs in a Bucket at Schools Scale, and Semi-structured Interview Form were used as data collection tools. The associations among the variables were examined through Pearson correlation and regression analyses conducted via the Process Macro. Mediation was examined using the bootstrap method in the regression analysis. The results indicated that teachers' competitive attitudes significantly predict their trust in co-workers. In addition, Crabs in the Barrel Syndrome had a full mediating role in the relationship between teachers' competitive attitudes and trust in co-workers. Content analysis of the interviews also revealed three themes: "the motivations and reasons for teachers' competitive attitudes," "the effects of competitive attitudes on their relationships with colleagues," and "the role of the crabs in the barrel syndrome in the effect of competitive attitudes on trust in co-workers." The qualitative findings supported the quantitative findings. Recommendations were made to prevent teachers' competitive attitudes and perceptions of the crabs in the barrel syndrome from affecting their trust in co-workers.

Introduction

Trust, as an organizational characteristic, is considered important in social groups requiring coordinated actions (Lusher et al., 2014) and is regarded as a critical element in the

* Correspondency: merveaydin389@marun.edu.tr

high functioning of educational institutions (Tschannen-Moran, 2020). The literature highlights the function of trust in establishing and fostering collaboration across people (De Dreu, 2012; Kuipers, 2022; Lusher et al., 2014). Teachers with different personal characteristics also appear to be dependent on working together to increase the success of their institutions and achieve common goals (Keravnos & Symeou, 2024). However, it is also known that horizontal relationships in organizations consist of competitive tendencies as well as cooperation (Ömüriş et al., 2020).

Competition in organizations can produce positive or negative reactions and outcomes (Murayama & Elliot, 2012). Competition can be viewed a factor that increases productivity (Huck et al., 2012). Additionally, study have shown that high levels of competition may have negative consequences for productivity and performance (Tuyet & Ninh, 2023). Views on the necessity and effects of competition may vary depending on the context (Nelson & Dawson, 2017). Moreover, competition can also emerge as an element that hinders trust (Lusher et al., 2014; Sun et al., 2021). Therefore, it is predicted that competitive tendencies may be greater in environments where trust is low. Competitiveness in work environments can, over time, pave the way for unethical behavior among employees, who may attempt to sabotage others in the context of the crabs in the barrel syndrome (CBS) (Ece, 2024). Based on this literature, CBS may influence employees' competitive tendencies. The objective of this study is to investigate teachers' levels of trust in co-workers and competitiveness within the context of CBS. In this regard, the study investigates the mediating role of CBS in the relationship between trust in co-workers and competitiveness.

Trust in Co-workers

Trust is widely defined as having favorable expectations regarding others' intentions and practices (Rousseau et al., 1998). Trust in co-workers can motivate individuals to work harder by fostering the belief that their co-workers are doing their best (Lau & Liden, 2008). In the teaching profession specifically, trust in co-workers is considered important for teachers in carrying out their daily activities (Choong & Ng, 2024). The literature indicates that trust among teachers produces positive outcomes. Trust among teachers facilitates the development of positive social relationships (Akinyemi et al., 2020) and supports collaborative work (Kolleck et al., 2021). A culture of trust in relationships among teachers within the school environment is seen as a fundamental prerequisite for building a trust-based relationship between teachers and students (Tschannen-Moran & Gareis, 2015). Furthermore, collaboration and trust among teachers are considered a school-level factor that influences student achievement (Sun et al., 2023) and student performance (Bubale et al., 2021). Ultimately, teachers' trust in their colleagues emerges as an important element for the effectiveness and efficiency of schools (Choong et al., 2018).

Competitiveness Among Teachers

Competition is defined as a social situation in which an individual believes that their goals are in opposition to the goals of others (Houston & Queen, 2019). Competition, which forms the basis of many activities in human life, can be widely observed in educational, sports, workplace, and social settings in order to achieve external goals (Vallerand et al., 1986). Individuals can also compete with each other in many ways during their professional activities (Murayama & Elliot, 2012).

The literature emphasizes that competition can have varied effects (Belfield & Levin, 2002). Some aspects of competition can enhance team performance (Lusher et al., 2014). By

contrast, when employees perceive the level of competition to be high, the performance-enhancing effect of competition may disappear (Bani-Melhem et al., 2023). Murayama and Elliot (2012) found that competition can both facilitate performance by encouraging performance-approach goals and undermine it by encouraging performance-avoidance goals.

High levels of competition in the workplace can cause individuals to compare themselves to others and lead to jealousy (Bani-Melhem et al., 2023). Furthermore, competition can lead to negative social interactions (Olitsky, 2011) and hinder trust (Sun et al., 2021). However, teachers may display competitive behavior to protect their positions (Salakhova et al., 2021). Zeer et al. (2019) consider competitiveness to be a personal characteristic of teachers. Nevertheless, competition does not appear to be essential in educational contexts and is not universally accepted (Nelson & Dawson, 2017). Because individuals' responses to competitive tendencies are complex, the effect of competition on student learning can vary (DiFrancesca & Spencer, 2025). Additionally, research has shown that competition in an educational context can have negative consequences (Vallerand et al., 1986).

Crabs in the Barrel Syndrome

CBS is a metaphor that explains the attempts of individuals belonging to a particular group to hinder the progress of other group members in order to protect their own progress or social status (Gellez et al., 2024; Pegues, 2018). This metaphor takes its name from the unsuccessful attempts of crabs trying to escape from a barrel (Lasquety-Reyes, 2016). Focused solely on their own progress, the crabs inside the barrel pull each other down instead of supporting each other's escape attempts (Billote et al., 2021). Ultimately, every attempt initiated by the crabs to escape the barrel ends in inability as the crabs below pull the ones above back down (Allison et al., 2019).

CBS is shaped by the belief, 'If I cannot succeed, neither can you' (Çavuş & Sarpkaya, 2021). Bulloch (2017) states that three overlapping elements constitute the driving force behind CBS. These elements are envy, the desire to ensure that the other person does not do better than oneself; competitiveness, the effort to take over the other person's position; and burden, the attempt to appropriate another person's success and thereby diminish that person. The prominent reasons for CBS include envy, jealousy, and not wanting others to be more successful than oneself (Billote et al., 2021).

The phenomenon of CBS can be explained by Social Comparison Theory (Festinger, 1954) and Social Identity Theory (Tajfel & Turner, 1979). According to Social Comparison Theory, people measure themselves against others to assess their capabilities and status (Festinger, 1954). In other words, people can draw conclusions about their own performance and level of development by comparing themselves to others around them (Uzum et al., 2022). The CBS phenomenon, which can be based on Social Comparison Theory, also arises when people evaluate their own success by comparing it to the success of others (Gellez et al., 2024).

In accordance with Social Identity Theory, people generally prefer to act as members of a social group rather than as individuals within society (Mlicki & Ellemers, 1996). Having a shared social identity may require solidarity and harmony among members (Baumeister et al., 2016). However, employees who share the same social identity and share a goal of success may exhibit behavior that hinders each other rather than supporting these efforts (Miller, 2019). CBS can also be seen as a tendency to maintain balance among group members (Connor & Miller, 2014).

Although the phenomenon of CBS is considered a negative attitude, it is known that CBS may also be observed among members of the teaching profession (York-Barr & Duke, 2004). However, the literature shows that CBS is an obstacle to teacher leadership (Duke, 1994), a potential problem for teachers' self-management (David, 2020), and has a negative effect on job success and happiness (Jafari et al., 2023). Furthermore, CBS has been associated with psychological distress preceding depression (Maharani, 2021). CBS is considered a phenomenon that must be prevented, as it can lead to undesirable results such as turnover intentions, obstacles to advancement, and negative emotions (Miller, 2019).

The Present Study

Policy makers around the world emphasize that the competitive advantage of nations may be related to teacher qualifications (Rönnström, 2015), and competitiveness among teachers has increasingly attracted attention (Ugli, 2019). Additionally, it is predicted that Generation Y will constitute approximately 75% of the workforce by 2030 (Bump, 2025), and Generation Y is reported to have a higher tendency toward competitiveness and a lower tendency toward trust compared to Generation X (Gupta & Goyal, 2018). However, the increasing complexity of the classroom environment and school activities requires teachers to build trust-based relationships and collaborate rather than compete (Kolleck et al., 2021). Furthermore, the literature highlights that interaction among teachers is a critical element for students' learning processes (Ali et al., 2019) and emphasizes the positive effects of trust in co-workers on students (Sun et al., 2023). Therefore, competitiveness and trust among teachers remain relevant issues for educational organizations. To date, only a few studies have investigated teachers' trust in their co-workers (Akinyemi et al., 2020; Choong & Ng, 2024; Choong et al., 2018; Choong et al., 2020; Kolleck et al., 2021), their competitiveness (Chen & Chen, 2019; Kahveci, 2021), and their CBS (Çavuş & Sarpkaya, 2022; Jafari et al., 2023). This study investigates the mediating role of CBS in the relationship between trust in co-workers and competitiveness among teachers.

There are various theoretical foundations for considering CBS as a mediator in the relationship between trust in co-workers and competitiveness. Research shows that trust in co-workers and competitiveness are negatively related (Ömüriş et al., 2020) and that Type A personality, which involves competitive tendencies, is positively related to CBS (Uzum et al., 2022). Furthermore, the literature suggests that competition is a factor that hinders trust (Lusher et al., 2014; Sun et al., 2021). CBS is closely associated with competitiveness (Combs et al., 2019; Miller, 2019), and it is noted that CBS may reduce trust in co-workers (Uzum et al., 2022).

Social Exchange Theory (Emerson, 1976) may offer a useful perspective in explaining the interaction between trust in co-workers, competitiveness, and CBS. Social Exchange Theory can provide a theoretical foundation for understanding social interaction in the context of educational institutions (Choong & Ng, 2024). A central tenet of Social Exchange Theory is that an initial action leads to relational responses between people, and these responses change attitudes or behaviors (Cropanzano et al., 2017). In other words, organizational members can trust others in response to the trust shown to them (Keck & Karelaia, 2012). An increase in an individual's perceived trust enables them to act in a cooperative manner, motivated by the desire to benefit others and achieve personal gain (De Dreu, 2012). Conversely, a lack of trust is thought to lead to competitive tendencies, as it reduces an individual's trust in social norms and their willingness to cooperate (Kuipers, 2022). In line with competitive tendencies, people may behave like crabs in a barrel when trying to reach certain opportunities,

attempting to pull back anyone who tries to move forward (Williams, 2020). However, no study was identified that examined the relationship between trust in co-workers, competitiveness, and CBS among teachers.

In light of the literature reviewed above, the present study aims to explore whether CBS functions as a mediator in the relationship between teachers' competitive attitudes and their trust in co-workers. Accordingly, the following research questions were formulated.

- What are the levels of teachers' competitive attitudes, perceptions of the CBS, and trust in co-workers?
- Is there a significant relationship between teachers' competitive attitudes, their perceptions of the CBS, and their trust in co-workers?
- Does CBS play a mediating role in the relationship between teachers' competitive attitudes and their trust in co-workers?
- What are the common themes regarding teachers' competitive attitudes, their trust in co-workers, and their experiences of the CBS?
- How do perceptions of the CBS mediate the relationship between teachers' competitive attitudes and their trust in co-workers?

Method

Research Design

The study adopted an explanatory sequential mixed-methods design, in which the strengths of one methodological approach are used to compensate for the limitations of the other (Creswell & Plano Clark, 2018). The calculated regression coefficients guided the examination of the relationship between competitive attitudes and trust in co-workers, as well as the mediating role of CBS. Because teachers' views were considered important for gaining a deeper understanding of these relationships and informing intervention recommendations, a mixed-methods approach was adopted.

Study Group

The population of the quantitative phase of the study consisted of 21,998 teachers working in four districts (Kadıköy, Kartal, Sultanbeyli, and Pendik) of Istanbul Province during the 2024–2025 academic year. Convenience sampling was used to select the sample. Krejcie and Morgan (1970) state that a sample of 377-379 is sufficient to represent a population of 20,000-30,000. Nevertheless, in order to increase the sample size, 750 scale forms were distributed to teachers working in the districts covered by the study. After excluding unreturned, incomplete, and incorrectly completed forms, the analyses were conducted using data from 464 respondents. The demographic information of the study group is summarized in Table 1.

Table 1. Demografic Information

Variables	Groups	Frequency (f)	Percentage (%)
Gender	Female	325	70
	Male	139	30
Gender of the school principal	Female	105	23
	Male	359	77
Years of service in the teaching profession	0-5 years	99	21
	6-10 years	133	29
	11-15 years	97	21
	16-20 years	57	12
	21 years and more	78	17
School level of employment	Elementary school	138	30
	Middle school	164	35
	High school	162	35
Level of education	Bachelor's degree	344	74
	Graduate degree	120	26
Number of teachers working at the school	25 and fewer	67	14
	26-50	251	54
	51 and more	146	32
Time worked with the current school principal	0-1 year	177	38
	1-4 years	201	43
	4 years and more	86	19

During the qualitative stage of the study, 20 volunteer teachers from the quantitative sample were selected through maximum variation sampling. Maximum variation sampling can provide broader representation of diverse participant characteristics than random sampling (Vitcu et al., 2007). Teachers from different education levels and with different lengths of service were selected to ensure maximum variation in the sample.

In the qualitative stage of the study, competitive attitude scores obtained from the quantitative data analysis were taken into account when selecting participants, and interviews were conducted with teachers who exhibited relatively high levels of competitive attitudes. The aim was to obtain more in-depth data on the research topic. The principle of data saturation was used as the basis for determining the size of the qualitative sample (Patton, 2002). The saturation ratio proposed by Sharma et al. (2024) was used to assess data saturation [Saturation ratio = Number of new unique themes/Number of unique themes in the core set]. When the saturation ratio fell below 5%, two additional interviews were conducted. Since no new themes emerged and the saturation ratio remained unchanged following these additional interviews, the data collection process was concluded. Of the 20 teachers, nine were male and 11 were female. Four worked in elementary schools, six in middle schools, and 10 in high schools.

Data Collection Tools

The Teacher Competitiveness Scale

The Teacher Competitiveness Scale, which measures teachers' competitive attitudes, was developed by Kahveci (2021). The scale consists of four sub-dimensions and 16 items: "winning by competition", "approval", "superiority", and "exclusion". The four-factor

structure explained 59% of the total variance. In the original study, the Cronbach's alpha internal consistency coefficient was .82 for the total scale score, .72 for the "winning by competition" dimension, .78 for the "approval" dimension, .73 for the "superiority" dimension, and .72 for the "exclusion" dimension. In the present study, the Cronbach's alpha internal consistency coefficient was .82 for the total scale score, .74 for the "winning by competition" dimension, .77 for the "approval" dimension, .78 for the "superiority" dimension, and .78 for the "exclusion" dimension. Higher scores indicate stronger competitive attitudes among teachers (Kahveci, 2021).

Trust in Co-workers Scale

The Trust in Co-workers Scale, which measures individuals' levels of trust in their work colleagues, was developed by Cook and Wall (1980). The scale was adapted into Turkish by Çetinceli (2023). The seven-point Likert scale consists of a single dimension and six items. The Cronbach's alpha internal consistency coefficient was .92 in both the original and the present study. Higher scores indicate greater trust in co-workers (Çetinceli, 2023).

Crabs in a Bucket at Schools Scale

The Crabs in a Bucket at Schools Scale, which measures teachers' perceptions of the CBS, was developed by Çavuş and Sarpkaya (2021). The scale consists of two sub-dimensions, "individual factors" and "organizational factors," and 27 items. In the original study, the Cronbach's alpha internal consistency coefficient was .93 for the total scale score, .95 for the "individual factors" dimension, and .93 for the "organizational factors" dimension. In the present study, the Cronbach's alpha internal consistency coefficient was .94 for the total scale score, .96 for the "individual factors" dimension, and .89 for the "organizational factors" dimension. Higher scores indicate stronger perceptions of CBS among teachers (Çavuş & Sarpkaya, 2021).

Personal Information Form

The personal information form comprised questions related to participants' gender, years of professional experience, educational attainment, and the school level at which they were employed.

Semi-Structured Interview Form

A semi-structured interview form was employed in the qualitative phase of the study. The interview form contained seven questions. The form was constructed based on the results of the quantitative analyses as well as insights derived from the relevant literature. It was subsequently reviewed by three expert faculty members, and a pilot implementation was carried out with two teachers to evaluate the clarity and comprehensibility of the items. Following the pilot study, the necessary revisions were made, and the final version of the form was prepared.

In qualitative research, validity is primarily achieved through the detailed and accurate reporting of categories and interpretations, whereas reliability involves minimizing inconsistencies in data interpretation among researchers (Yıldırım & Şimşek, 2019). Accordingly, three faculty members were consulted for expert feedback.

Data Analysis

Skewness, kurtosis, and Z-score analyses were conducted to assess the suitability of the data for parametric testing. It was observed that all standardized scores of the data were within the range of -3 to +3, leading to the conclusion that there were no univariate outliers in the dataset (Schumacker & Tomek, 2013). Multivariate outliers were identified through Mahalanobis distance. The skewness and kurtosis values were re-examined and summarized in Table 2, confirming that the dataset adhered to normal distribution assumptions. Descriptive statistics, including mean and standard deviation, were calculated, followed by correlation analysis to investigate associations between the variables. The presence of multicollinearity, one of the prerequisites for regression analysis, was examined through the variance inflation factor (VIF), tolerance value (TV), and condition index value (CI) of the variables in the model. If VIF≥ 10, TV≤ 0.20, and CI≥ 30, then a multicollinearity problem is present (Büyüköztürk, 2011; Field, 2005). In this model, the largest VIF value was 1.04, the TV value was .97, and the condition index value was 12.54, indicating no multicollinearity problem.

The mediating role of CBS in the relationship between teachers' competitive attitudes and their trust in co-workers was examined using a regression-based bootstrapping technique. The bootstrapping process was applied to verify the significance of the mediating effect. The bootstrapping process, which involves retesting the significance of direct and indirect effects by increasing the sample size, determines the lower and upper confidence interval limits. For the indirect effect to be significant, this limit must not include zero. In this study, 10,000 bootstrap resamples were performed to determine the lower and upper confidence intervals and the bootstrap coefficient (Hayes, 2017).

In the analyses, the statistical significance of the difference between the means was tested at the .05 level. When interpreting the arithmetic means for the five-point Likert-type Teacher Competitiveness Scale, scores between 1.00–1.79 were considered "very low," 1.80–2.59 as "low," 2.60–3.39 as "moderate," 3.40–4.19 as "high," and 4.20–5.00 as "very high". For the five-point Likert Crabs in a Bucket at Schools Scale, the developers stated that scores between 1.00–2.22 should be considered "low, " 2.23–3.83 as "moderate, " and 3.84–5.00 as "high". For the seven-point Likert Trust in Co-workers Scale, scores between 1.00–1.86 were considered "quite low, " 1.87–2.72 "very low," 2.73–3.58 "low, " 3.59–4.44 "moderate, " 4.45–5.30 "high, " 5.31–6.16 "very high, " and 6.17–7.00 "quite high". Additionally, in interpreting correlation analysis, the range of .00–.30 is considered a "low" level of relationship, the range of .31-.70 is considered a "moderate" level of relationship, and the range of .71-1.00 is considered a "high" level of relationship (Büyüköztürk, 2011).

In the analysis of qualitative data, the "content analysis" method was preferred. The basic process in content analysis involves identifying codes and possible sub-themes, grouping the identified codes under themes, and comparing coding clusters (Vaismoradi et al., 2016). The data collected from 20 interviews were initially transcribed and entered into a digital format for analysis. The data from the interviews were recorded. The organized data were subsequently processed using MAXQDA 2020. The dataset was read multiple times to facilitate analysis, and the examination was guided by the research questions. Coding of the identified themes was performed independently by two academics who were not part of the research team. The coding reliability percentage was calculated using the "Consensus/(Consensus + Disagreement)" formula proposed by Miles and Huberman (1994). Coding reliability exceeded the recommended minimum consensus level of 80% (Miles & Huberman, 1994), with an achieved reliability of 92%. When coding disagreements were

resolved through discussion until consensus was reached. The findings were organized in line with the research questions.

Results

Quantitative Analysis Results

Pearson Analysis

Regarding the first sub-objective, the findings of the correlation analysis are provided in Table 2, including the skewness and kurtosis values of teachers' competitive attitudes, CBS perceptions, and trust in co-workers scores, along with the relationships among these variables.

Table 2. Correlation Values and Descriptive Statistics Among the Variables of the Study

	Skewness	Kurtosis	x̄	SS	1	2	3
1. Competitive Attitude	-.04	-.72	2.98	.59	1		
2. CBS	.39	-.58	2.26	.76	.19**	1	
3. Trust in Co-workers	-.53	-.56	5.72	1.00	-.13**	-.51**	1

*p < .05, **p < .01

The results indicated that skewness and kurtosis values fell within the ±2 range, suggesting that the data were normally distributed (George & Mallery, 2019). Furthermore, examining the descriptive statistics in Table 2, it can be seen that teachers' reported moderate levels of competitive attitudes and CBS perceptions, and very high levels of trust in co-workers. Considering the correlations among the variables, there was a positive, low-level, and significant relationship between competitive attitude and CBS ($r = .19$, $p < .001$). Moreover, a negative, low-level, and significant relationship was found between competitive attitude and trust in co-workers ($r = –.13$, $p < .001$). Finally, a negative, moderate, and significant relationship was determined between trust in co-workers and CBS ($r = –.51$, $p < .001$). The findings show that as competitive attitudes and CBS increase, trust in co-workers decreases, and as competitive attitude increases, CBS also increases.

Results of Mediation Analysis

In line with the second sub-objective of the study, the mediating role of CBS in the relationship between competitive attitude and teachers' trust in co-workers was examined using a regression-based bootstrapping approach. A total of 10,000 bootstrap samples were generated, and the estimates were interpreted within 95% confidence intervals adjusted for bias. The mediation model followed Model 4 proposed by Hayes (2017), incorporating one independent variable, one dependent variable, and one mediator. The conceptual framework is shown in Figure 1, and the results are presented in Table 2.

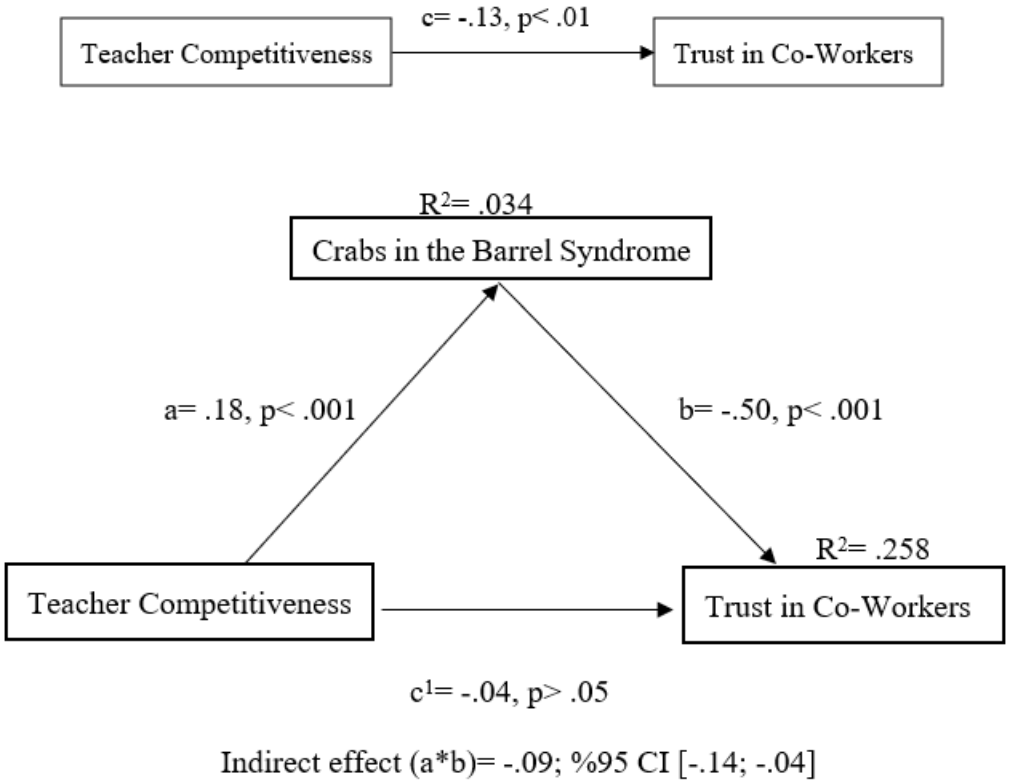


Figure 1. Hypothesized mediation model: Teacher competitiveness predicts trust in co-workers through Crabs in the Barrel Syndrome [R^2 = .258, F(2, 461) = 80.634, p < .001]

When examining Figure 1, teachers' competitive attitudes positively predicted CBS (a = .18; p < 0.001). CBS, on the other hand, negatively predicted trust in co-workers (b = -.50; p < 0.001). Furthermore, competitive attitudes among teachers negatively predicted trust in co-workers (c = -.13; p < 0.01). When the mediating variable, CBS, was included in the model, this effect was found to be c′= -.04 and statistically insignificant. Since the coefficient that emerged with the inclusion of the mediating variables in the model was a non-significant coefficient, full mediation was observed, and the 95% confidence intervals (CI) for the significance of the full mediating indirect effects determined in the model are given in Table 3.

Table 3. Bootstrapping Results of the Mediation of CBS

			95% CI			
Indirect effects	Coefficient	S.e.	LLCI	ULCI	R^2	$F_{(2\text{-}461)}$
TC→CBS→TcW	-.09	.07	-.14	-.04	.258	80.634
Direct effects	Coefficient	S.e	t value			
TC→ CBS	.18	.06	4.04**			
CBS→TcW	-.50	.05	-12.31**			

** p < 0.001, *TC* Teacher Competitiveness, CBS Crabs in the Barrel Syndrome , TcW Trust in Co-Workers , *Se* Standard error, *CI* Confidence Interval.

Competitive attitudes and CBS among teachers explain 26% of the variance in trust in co-workers (Table 3). In mediation analysis using the bootstrapping technique, support for the study's hypothesis is established when the 95% confidence interval (CI) does not include zero (0), thereby confirming the research hypothesis (Gürbüz, 2019). CBS significantly mediates the relationship between teachers' competitive attitudes and trust in co-workers (Bootstrap

Coefficient = -.09, 95% CI [-.14; -.04]), and the confidence interval did not include zero.

Qualitative Analysis Results

The qualitative section of the study presents findings derived from interviews with teachers. Accordingly, the codes generated through question-based analysis of the semi-structured interview data are presented first. Subsequently, the themes and codes obtained from the analysis of the semi-structured interviews—conducted to examine the mediating role of perceptions of the CBS in the relationship between teachers' competitive attitudes and their trust in colleagues—are presented. Each theme is explained in detail and supported by direct quotes from the participants. This approach aimed to enhance the transferability and reliability of the qualitative findings.

Table 4 below presents the codes derived from the question-based analysis of data collected through the semi-structured interviews.

Table 4. Question-Based Coding of Data

Questions	Codes
1. Research Question	Competing to stand out (12), Desire for approval (10), Establishing superiority (8), Excluding others (6)
2. Research Question	Weakening of cooperation (11), Lack of trust (12), Conflict (9), Decline in motivation (8)
3. Research Question	Obstruction (13), Jealousy (10), Decreased motivation (7), Restricted cooperation (8)
4. Research Question	Decreased trust (14), Increased suspicion and caution (10), Broken trust relationships (9), Avoiding information sharing (7)
5. Research Question	Decreased cooperation (12), Increased formality and distance (11), Avoiding interaction/reducing communication (8), Feeling pushed out of the group/isolation (6)
6. Research Question	Open communication (12), Mutual assistance (11), Planned cooperation (10), Shared responsibility (9)
7. Research Question	Management support (11), Recognition/reward (12), School culture (10), Motivation-enhancing practices (8)

Table 4 shows that, in the context of research question 1, the codes "competing to stand out," "desire for approval," "establishing superiority," and "excluding others" were prominent in participants' quotes when describing their competitive attitudes in the workplace or school setting. These findings provide insight into how participants' competitive attitudes are expressed through their behaviors.

Participants describe the effects of their competitiveness on their relationships with colleagues and on collaboration processes as "weakening of cooperation," "lack of trust," "conflict," and "decline in motivation." These findings highlight the destructive effects of competitiveness. Under research question 3, participants' quotes reveal that situations where they hinder or envy their colleagues' success influence their own behavior, with the codes "obstruction," "jealousy," "decreased motivation," "restriction of cooperation" standing out. These findings demonstrate how CBS manifests in participants' behaviors.

Participants described their competitive attitudes as leading to 'decreased trust,' 'increased suspicion and caution,' 'broken trust relationships,' and 'avoidance of information sharing" regarding their trust in co-workers, and their relationships with co-workers as characterized by "decreased cooperation," "increased formality and distance," "avoiding interaction/reducing communication," "feeling pushed out of the group/isolation." These

findings detail the destructive effects of competitiveness in the workplace within the context of co-workers and also reveal its implications for trust in co-workers.

In response to research question 6, the codes "open communication," "mutual assistance," "planned collaboration," and "shared responsibility" emerged in participants' quotes as the methods or strategies they employed to establish healthy collaboration with their co-workers. These findings suggest that the negative effects of competition can be balanced through healthy communication and collaboration mechanisms. In other words, teachers turned to strategies that prioritize collective solidarity over individual success in order to build positive relationships with their co-workers.

Participants identified the factors influencing competitive and cooperative relationships in the school environment as "management support," "recognition/rewards," "school culture," and "motivation-enhancing practices." These findings suggest that the competitive-collaborative relationships among teachers in schools are shaped not only by interpersonal interactions but also by a dynamic linked to the practices of school leaders. School leaders' adoption of a supportive leadership approach and their commitment to fair process management are considered key components of these competitive-collaborative relationships.

The codes obtained from the analysis of semi-structured interviews conducted to examine the mediating role of CBS in the relationship between teachers' competitive attitudes and trust in colleagues were grouped into three themes and presented in Table 5.

Table 5. Obtained Themes

Themes	Codes
Teachers' competitive attitudes, their motivations, and reasons	Competing to stand out Desire for approval Establishing superiority
The effects of competitive attitudes on relationships with co-workers	Weakening of cooperation Lack of trust Conflict
The role of the CBS in the effect of competitive attitudes on trust in co-workers	Obstruction Jealousy Decreased motivation

Theme 1 examines the causes and motivations behind teachers' competitive attitudes. Participants cite competing to stand out, desire for approval, and establishing superiority as the reasons for their competitive attitudes. These findings suggest that teachers' competitive attitudes may be related not only to their professional performance but also to psychological and social needs. Quotes related to these codes are provided below:

Competing to stand out: "I constantly strive to stand out in school projects and classroom activities. This both increases my own motivation and allows me to manage competition with other teachers. Although this competitive feeling can be exhausting at times, I think it is necessary for my self-improvement (P3)."

Desire for approval: "I want the work I do to be appreciated, and this gives me both motivation and confidence. Being appreciated, especially by managers and colleagues, allows me to display my competitive attitudes in a more controlled manner. My desire to constantly improve myself is also fueled by this need for approval (P12)."

Establishing superiority: "I try to get ahead of others to demonstrate my competence. This

sometimes creates tension in my relationships with co-workers, but I believe it is necessary for my continuous development. The pursuit of superiority increases both my competitive attitude and my professional performance (P1)."

Theme 2 examines the effects of competitive attitudes on relationships with co-workers. Participants described the effects of their competitive attitudes on relationships with co-workers as weakened cooperation, lack of trust, and conflict. These findings suggest that competitive attitudes can hinder teamwork. An increase in competitive attitudes among teachers can negatively impact the school's collaborative environment. Quotes related to these codes are provided below:

Weakening of cooperation: "When I am competitive, I find it difficult to collaborate with my colleagues. I focus more on my own work and sometimes prefer to stay in the background rather than taking an active role in joint projects. This situation negatively affects team communication in the long term (P5)."

Lack of trust: "I have started to be more cautious and distant in my communication with my colleagues because the sense of trust has diminished. Sometimes even minor disagreements can lead to a loss of trust. This situation also limits the team's ability to work together (P14)."

Conflict: "When I experience disagreements with colleagues, my competitive attitude becomes more pronounced. During discussions, I sometimes realize I have lost control, and relationships are negatively affected. (P17). "

Theme 3 examines the role of the CBS in the effect of competitive attitudes on trust in co-workers. Participants describe the effects of CBS on the relationship between a competitive attitude and trust in co-workers as obstruction, jealousy, and decreased motivation. These findings suggest that in highly competitive environments, supportive relationships among teachers may weaken through CBS, potentially undermining trust. Furthermore, it is believed that obstructive behaviors may hinder information sharing, while jealousy and decline in motivation may negatively impact teachers' well-being and job performance. Quotes related to these codes are provided below:

Obstruction: "Sometimes I don't want my colleagues to succeed and try to obstruct their progress in projects. This seriously damages our trust and makes collaboration difficult. Although I try to reduce these behaviors when I notice them, my competitive attitudes sometimes prevail (P6)."

Jealousy: "Jealousy sometimes prevents the collaboration and sharing I plan. Seeing other teachers' successes brings my competitive feelings to the forefront and shakes trust relationships. This limits my control in teamwork (P19)."

Decreased motivation: "My colleagues' successes sometimes lower my motivation and have a negative impact on my collaboration. This affects both my own performance and the team's ability to work together. When I become aware of it, I try to pull myself together, but it can happen again in a competitive environment (P10)."

Discussion

This study examined the mediating role of CBS in the relationship between teachers' competitive attitudes and trust in co-workers. Quantitative findings showed that as

competition increased, CBS tendencies rose, reducing trust in co-workers. Although competition was found to have a direct negative effect on trust, the fact that the relationship was fully mediated by CBS indicates that the process operates through a series of relational dynamics, primarily comparison and jealousy. Qualitative data also supported this pattern; it showed that when competitive interactions were combined with behaviors such as comparison, perceived exclusion, avoidance of information sharing, and caution in communication, collaborative bonds weakened. This picture suggests that trust erodes more quickly when teachers experience competition along the lines of "position and superiority" rather than "development and mastery" (Murayama & Elliot, 2012).

Social Comparison Theory (Festinger, 1954) proposes that individuals evaluate their abilities and status by comparing themselves to others; when competition intensifies, these comparisons can increase perceived threats and status anxiety. In the context of educational organizations, trust is a cornerstone of social relationships and the pursuit of common goals (Tschannen-Moran & Hoy, 2000; Tschannen-Moran & Gareis, 2015). It is therefore reasonable to expect that a competitive climate may create tension with trust. Indeed, both the findings referenced in the introduction and the references in the current discussion show that the perception of competition can weaken belonging and social connectedness (Sun et al., 2021), that comparison- and control-based cultures erode trust (Tschannen-Moran & Hoy, 2000), and that competition can undermine cooperation (Ooi & Wong, 2023).

In this context, CBS offers a critical intermediary mechanism explaining the link between competition and trust. Metaphorically described as "crabs in a barrel" pulling each other down, CBS points to a pattern in which jealousy, competitiveness, and the tendency to diminish others' success are intertwined (Billote et al., 2021; Bulloch, 2017; Pegues, 2018). The conceptual framework introduced at the outset allows CBS to be interpreted through both Social Comparison and Social Identity processes: Status sensitivity and the reflex to maintain group-internal balance can trigger "pulling down" behaviors toward successful members (Connor & Miller, 2014; Gellez et al., 2024; Lasquety-Reyes, 2016). The full mediation identified in this study suggests that the trust-eroding effect of competition manifests itself through indirect harmful behaviors such as information withholding and passive obstruction, particularly under conditions where CBS comes into play (Wang et al., 2022).

The context-sensitive effect of competition is particularly important in educational organizations. When its level and structure are not carefully managed, it can produce negative results in terms of performance and unethical behavior (Bani-Melhem et al., 2023; Olitsky, 2011; Tuyet & Ninh, 2023). Considering that competition is not universally or necessarily perceived as beneficial in educational contexts (Nelson & Dawson, 2017) and that it may have heterogeneous effects on students' learning processes (DiFrancesca & Spencer, 2025; Vallerand et al., 1986), it becomes important to reconsider how school climates are structured. Emphasizing a "learning/mastery" orientation rather than a "performance/ranking" orientation appears to offer greater protection in terms of fostering trust. Specifically for teachers, competitiveness aimed at protecting one's position (Salakhova et al., 2021) or the interaction between competitiveness and personal characteristics (Zeer et al., 2019) may reinforce micro-psychosocial conditions that can fuel CBS.

The study's findings reaffirm that trust is not only an interpersonal emotional state but also an organizational capacity. Cooperation and information flow increase in communities where trust is strong; this is associated with teachers' effectiveness and students' learning outcomes (Ali et al., 2019; Bubale et al., 2021; Choong et al., 2018; Choong & Ng, 2024; Kolleck et al.,

2021; Sun et al., 2023). Conversely, the erosion of trust limits the capacity for "learning organizations" (Lusher et al., 2014; Tschannen-Moran, 2020). This study supports a mechanism implying that, in competitive climates where CBS is in play, the erosion of trust undermines joint planning, transparent communication, and professional learning communities (Lau & Liden, 2008; Rousseau et al., 1998).

At the educational ecosystem level, the study's results are consistent with the professional work environment and school climate literature. When conditions such as open communication, psychological safety, fair processes, and supportive leadership are strengthened, teachers' effectiveness over time increases and is positively related to student learning (Kraft & Papay, 2014). The quality of school-based social capital and horizontal ties is reflected in student performance through knowledge sharing and innovation capacity (Leana & Pil, 2006). Current findings suggest that in competitive climates with high CBS, these channels may narrow; information hoarding and social undermining behaviors negatively affect teacher well-being and job satisfaction (Duffy et al., 2002), leading to burnout and intentions to leave (RAND, 2024). Therefore, framing competition in schools within collective goals, fair evaluation, and constructive feedback has the potential to strengthen collaboration (Johnson & Johnson, 2005).

In conclusion, this study provides comprehensive evidence that the relationship between teachers' competitive attitudes and trust in co-workers is mediated by CBS; it shows that the nature of competition, whether threatening or developmental determines the quality of organizational relationships. Rather than completely eliminating competition, professional cultures that nurture trust and psychological safety, encourage reciprocity and cooperation, and are structured around fair processes and collective goals appear to be more productive. This perspective aligns with both the theoretical framework outlined in the introduction (Emerson, 1976; Festinger, 1954; Tajfel & Turner, 1979) and the findings of the applied literature (Kraft & Papay, 2014; Leana & Pil, 2006; Tschannen-Moran, 2020), and it reemphasizes that maintaining trust in schools is not merely an interpersonal nicety but a strategic organizational capacity.

Conclusion and Recommendations

According to the findings of this research, developing a professional culture that supports trust and collaboration in schools can make important contributions to both practice and research. In practice, psychologically safe working environments—where teachers can freely express their opinions, mistakes are seen as a natural part of learning, and constructive feedback is encouraged—are likely to foster stronger professional relationships over time. In school climates where competition emphasizes collective success rather than individual rankings, multidimensional and fair evaluation processes are implemented, and teachers' contributions are recognized, professional solidarity is expected to strengthen, while destructive competitive behaviors are likely to diminish. Furthermore, regular professional learning communities that support knowledge sharing, collaborative production, joint planning, and mentoring practices can strengthen trust by reinforcing social bonds within the team. The adoption of a supportive leadership approach by school leaders, along with attention to fair process management, is also considered an important component of this developmental process.

From a research perspective, examining competition, trust, and CBS across different school types and cultural contexts may make significant contributions to the literature. Longitudinal

studies could clarify the temporal aspects of these relationships, while experimental or intervention-based research could evaluate the effects of programs focused on psychological safety and collaboration. Furthermore, social network analyses can illuminate the structures of teacher interactions and information flow, offering a more holistic perspective on how competition and trust manifest at the organizational level. Investigating the moderating roles of teachers' personal and professional characteristics in this process is also considered a valuable direction for future research. Overall, managing competition within a framework that supports healthy collaboration, professional solidarity, and shared goals may be more appropriate than attempting to eliminate it entirely. Such an approach may better support teacher well-being and the sustainable development of schools as learning organizations.

Declarations

Acknowledgments: *Not applicable.*
Funding: *Not applicable.*
Ethics Statements: *The necessary legal permissions and ethical committee approval were obtained before the research data was collected. In this context, Marmara University, Institute of Educational Sciences, Research and Publication Ethics Committee decided that this research was ethically appropriate with its decision numbered 03-23 on 01/03/2024. This study was conducted in accordance with the ethical standards of the 1964 Declaration of Helsinki and its later amendments.*
Conflict of Interest: *The authors declare that they have no competing interests in this section.*
Informed Consent: *Informed consent was obtained from all participants prior to their involvement in both the quantitative survey and the qualitative interview phases of this mixed-methods study. Participants were informed of the study purpose, methods, voluntary nature of participation, their right to withdraw at any time without consequence, and how confidentiality and anonymisation of their data would be maintained.*
Data availability: *The data generated and/or analyzed during the present study are available from the corresponding author upon reasonable request. The data cannot be directly placed in a public repository due to limited permissions obtained from the participants. However, the corresponding author are willing to share anonymized data with interested researchers upon request.*

References

Akinyemi, A. F., Rembe, S., & Nkonki, V. (2020). Trust and positive working relationships among teachers in communities of practice as an avenue for professional development. *Education Sciences*, *10*(5), 136. doi:10.3390/educsci10050136

Ali, M. R., Ashraf, B. N., & Shuai, C. (2019). Teachers' conflict-inducing attitudes and their repercussions on students' psychological health and learning outcomes. *International Journal of Environmental Research and Public Health*, *16*(14), 2534. doi:10.3390/ijerph16142534

Allison, S. T., Goethals, G. R., Marrinan, A. R., Parker, O. M., Spyrou, S. P., & Stein, M. (2019). The metamorphosis of the hero: Principles, processes, and purpose. *Frontiers in Psychology*, *10*, 606. doi:10.3389/fpsyg.2019.00606

Bani-Melhem, S., Shamsudin, F. M., Abukhait, R., & Al-Hawari, M. A. (2023). Competitive psychological climate as a double-edged sword: A moderated mediation model of

organization-based self-esteem, jealousy, and organizational citizenship behaviors. *Journal of Hospitality and Tourism Management*, *54*, 139-151. doi:10.1016/j.jhtm.2022.12.011

Baumeister, R. F., Ainsworth, S. E., & Vohs, K. D. (2016). Are groups more or less than the sum of their members? The moderating role of individual identification. *Behavioral and Brain Sciences*, *39*, e137. doi:10.1017/S0140525X15000618

Belfield, C. R., & Levin, H. M. (2002). The effects of competition between schools on educational outcomes: A review for the United States. *Review of Educational Research*, *72*(2), 279-341. doi:10.3102/00346543072002279

Billote, W. J. S., De Sagon, G. A., Escoto, M. F., Pableo, A., Ponce, R., Ponce, T. E., ... & Ponce, J. M. (2021). Talangkang pag-iisip: An exposè of its positivity in the lens of students in a selected university in Baguio city. *JPAIR Multidisciplinary Research*, *43*(1), 36-56. doi:10.7719/jpair.v43i1.715

Bubale, D., Kasule, G. W., & Mbabazi, E. G. M. (2021). Relationship between distributed leadership and pupils' performance in government-aided primary schools in Kayunga district, Uganda. *International Journal of Education and Social Science Research*, *4*(2), 146-163. doi:10.37500/IJESSR.2021.4213

Bulloch, H. C. M. (2017). Ambivalent moralities of cooperation and corruption: Local explanations for (under) development on a Philippine island. *The Australian Journal of Anthropology*, *28*(1), 56-71. doi:10.1111/taja.12173

Bump, P. (2025). *Millennials vs. Gen Z: Why marketers need to know the difference*. Retrieved from https://blog.hubspot.com/marketing/millennials-vs-gen-z

Büyüköztürk, Ş. (2011). *Sosyal bilimler için veri analizi el kitabı [Data analysis handbook for the social sciences].* Ankara: Pegem Academy Publications.

Chen, Y. G., & Cheng, J. N. (2019). A study investigating teachers' competitiveness-Michael Porter's five forces model as theoretical basis. *Academy of Educational Leadership Journal*, *23*(2), 1-18.

Choong, Y. O., Jamal, N. Y., Hamidah, Y., & Seow, A. N. (2018). The mediating effect of trust on the dimensionality of organizational justice and organizational citizenship behavior amongst teachers in Malaysia. *Educational Psychology*, *38*(8), 1010-1031. doi:10.1080/01443410.2018.1426836

Choong, Y. O., & Ng, L. P. (2024). Shaping teachers' organizational citizenship behavior through self-efficacy and trust in colleagues: moderating role of collective efficacy. *BMC Psychology*, *12*(1), 532. doi:10.1186/s40359-024-02050-8

Choong, Y. O., Ng, L. P., Ai Na, S., & Tan, C. E. (2020). The role of teachers' self-efficacy between trust and organisational citizenship behaviour among secondary school teachers. *Personnel Review*, *49*(3), 864-886. doi:10.1108/PR-10-2018-0434

Combs, G. M., Milosevic, I., & Bilimoria, D. (2019). Introduction to the special topic forum: Critical discourse: Envisioning the place and future of diversity and inclusion in organizations. *Journal of Leadership & Organizational Studies*, *26*(3), 277-286. doi:10.1177/1548051819857739

Connor, J. B., & Miller, A. M. (2014). Occupational stress and adaptation of immigrant nurses from the Philippines. *Journal of Research in Nursing*, *19*(6), 504-515. doi:10.1177/1744987114536570

Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfilment. *Journal of Occupational Psychology, 53*(1), 39-52.

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). London: SAGE Publications.

Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. *Academy of Management Annals*, *11*(1), 479-516. doi:10.5465/annals.2015.0099

Çavuş, B., & Sarpkaya, R. (2021). Measuring "crabs in a bucket" phenomenon at schools: a scale development study. *Psycho-Educational Research Reviews, 10* (2), 314-327. doi:10.52963/PERR_Biruni_V10.N2.22

Çavuş, B., & Sarpkaya, R. (2022). Are schools a bucket of "Crabs"? A mixed method study at high schools in Turkey. *International Journal of Educational Reform*, *34*(3), 452-487. doi:10.1177/10567879221124883

Çetinceli, K. (2023). İş arkadaşlarına güven: Bir ölçek uyarlama çalışması [Trust in co-workers: A scale adaptation study]. *Uluslararasi Akademik Birikim Dergisi [Journal of International Academic Accumulation],* *6*(Special issue), 225–232. doi:10.5281/zenodo.10004442

David, I. (2020). Problems affecting the self-management of teachers' performance. *International Journal of Teacher Education and Teaching*, *1*(1), 57-65.

De Dreu, C. K. (2012). Oxytocin modulates cooperation within and competition between groups: an integrative review and research agenda. *Hormones and Behavior*, *61*(3), 419-428. doi:10.1016/j.yhbeh.2011.12.009

DiFrancesca, D., & Spencer, D. (2025). The effects of competitive classroom activities on undergraduates with varied levels of competitive preference. *Instructional Science*, (53), 1293–1311. doi:10.1007/s11251-025-09741-8

Duffy, M. K., Ganster, D. C., & Pagon, M. (2002). Social undermining in the workplace. *Academy of Management Journal, 45*(2), 331–351. doi:10.2307/3069350

Duke, D. L. (1994). Drift, detachment, and the need for teacher leadership. In D. R. Walling (Ed.), *Teachers as leaders: Perspectives on the professional development of teachers* (pp. 255–273). Bloomington, IN: Phi Delta Kappa Educational Foundation.

Ece, S. (2024). Crab syndrome in business life and collectivist/individualist culture. *International Journal of Business and Economic Studies*, *6*(2), 82-89. doi:10.54821/uiecd.1454123

Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology*, *2*, 335-362. doi:10.1146/annurev.so.02.080176.002003

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*(2), 117-140. doi:10.1177/001872675400700202

Field, E. (2005). *Discovering statistics using SPSS.* London: SAGE Publications..

Gellez, A. I., Diongson, A. J., & Evangelista, E. (2024). *Crab mentality and its impact on the Filipino youth in academic and social environments at cebu doctors' university.* Retrieved from https://www.academia.edu/download/120268966/CRAB_MENTALITY_AND_ITS_IMPACT_ON_THE_FILIPINO_YOUTH_IN_ACADEMIC_AND_SOCIAL_ENVIRONMENTS_AT_CEBU_DOCTORS_UNIVERSITY.pdf

George, D., & Mallery, P. (2019). *IBM SPSS statistics 25 step by step: A simple guide and reference* (15th ed.). London: Routledge.

Gupta, P., & Goyal, P. (2018). Gen Y attributes—Antecedents to teaching pedagogy. *Vision*, *22*(1), 78-87. doi:10.1177/0972262917750248

Gürbüz, S. (2019). *Sosyal bilimlerde aracı, düzenleyici ve durumsal etki analizleri [Mediating, moderating, and situational effect analyses in the social sciences].* Ankara: Seçkin Publishing.

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* New York: Guilford Press.

Houston, J. M., & Queen, J. S. (2019). Competition. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of personality and individual differences* (pp. 795–799). Berlin: Springer.

Huck, S., Lünser, G. K., & Tyran, J. R. (2012). Competition fosters trust. *Games and Economic Behavior*, *76*(1), 195-209. doi:10.1016/j.geb.2012.06.010

Jafari, S., Fereydouni Forouzande, N., Nadafzadeh Shirazi, L., & Ajam Zibad, M. (2023). The role of crab mentality syndrome and the glass ceiling phenomenon on the career success and happiness at work of female teachers with the mediation of turnover intention. *Journal of Managing Education in Organizations*, *12*(4), 43-70. doi:10.61186/meo.12.4.43

Johnson, D. W., & Johnson, R. T. (2005). New developments in social interdependence theory. *Genetic, Social, and General Psychology Monographs, 131*(4), 285–358. doi:10.3200/MONO.131.4.285-358

Kahveci, H. (2021). Determining the level of predicting teachers' competitive attitudes by educational beliefs. *Cukurova University Faculty of Education Journal*, *50*(2), 1069-1099. doi:10.14812/cuefd.934187

Keck, S., & Karelaia, N. (2012). Does competition foster trust? The role of tournament incentives. *Experimental Economics*, *15*(1), 204-228. doi:10.1007/s10683-011-9297-1

Keravnos, N., & Symeou, L. (2024). Practices, behaviours and actions of highly trusted primary school principals in Cyprus: An in-depth examination. *Educational Management Administration & Leadership*, 17411432241262388. doi:10.1177/17411432241262388

Kolleck, N., Schuster, J., Hartmann, U., & Gräsel, C. (2021). Teachers' professional collaboration and trust relationships: An inferential social network analysis of teacher teams. *Research in Education*, *111*(1), 89-107. doi:10.1177/00345237211031585

Kraft, M. A., & Papay, J. P. (2014). Can professional environments in schools promote teacher development? Explaining heterogeneity in returns to teaching experience. *Educational Evaluation and Policy Analysis, 36*(4), 476–500. doi:10.3102/0162373713519496

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, *30*(3), 607-610. doi:10.1177/001316447003000308

Kuipers, B. (2022). Trust and cooperation. *Frontiers in Robotics and AI*, *9*, 676767. doi:10.3389/frobt.2022.676767

Lasquety-Reyes, J. (2016). In defense of hiya as a Filipino virtue. *Asian Philosophy*, *26*(1), 66-78. doi:10.1080/09552367.2015.1136203

Lau, D. C., & Liden, R. C. (2008). Antecedents of coworker trust: leaders' blessings. *Journal of Applied Psychology*, *93*(5), 1130-1138. doi:10.1037/0021-9010.93.5.1130

Leana, C. R., & Pil, F. K. (2006). Social capital and organizational performance: Evidence from urban public schools. *Organization Science, 17*(3), 353–366. doi:10.1287/orsc.1060.0191

Lusher, D., Kremer, P., & Robins, G. (2014). Cooperative and competitive structures of trust relations in teams. *Small Group Research*, *45*(1), 3-36. doi:10.1177/1046496413510362

Maharani, A. C. (2021). The influence of excessive use of social media. *Indonesian Journal of Social Sciences*, *13*(1), 11-20. doi:10.20473/ijss.v13i1.26351

Miles, M, B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded Sourcebook.* (2nd ed). London: SAGE Publications.

Miller, C. D. (2019). Exploring the crabs in the barrel syndrome in organizations. *Journal of Leadership & Organizational Studies*, *26*(3), 352-371. doi:10.1177/1548051819849009

Mlicki, P. P., & Ellemers, N. (1996). Being different or being better? National stereotypes and identifications of Polish and Dutch students. *European Journal of Social Psychology, 26*(1), 97-114. doi:10.1002/(SICI)1099-0992(199601)26:1%3C97::AID-EJSP739%3E3.0.CO;2-F

Murayama, K., & Elliot, A. J. (2012). The competition–performance relation: A meta-analytic review and test of the opposing processes model of competition and performance. *Psychological Bulletin*, *138*(6), 1035-1070.

Nelson, R., & Dawson, P. (2017). Competition, education and assessment: connecting history with recent scholarship. *Assessment & Evaluation in Higher Education*, *42*(2), 304-315. doi:10.1080/02602938.2015.1105932

Olitsky, S. (2011). The role of fictive kinship relationships in mediating classroom competition and supporting reciprocal mentoring. *Cultural Studies of Science Education*, *6*(4), 883-894. doi:10.1007/s11422-011-9363-1

Ooi, J., & Wong, A. (2023). Competitive climate and teacher belongingness in schools. *Journal of Educational Change, 24*(2), 367–389. doi:10.1007/s10833-022-09459-9

Ömüriş, E., Erdem, F., & Özen Aytemur, J. (2020). The relationship between cooperative and competitive behavioral tendencies and trust in coworkers. *Evidence-Based HRM: A Global Forum for Empirical Scholarship*, 8(3), 345-360. doi:10.1108/EBHRM-03-2020-0034

Pegues, A. D. (2018). *An investigation into the social and individual conditionas that promote instigated acts of workplace incivility between black professionals* (Unpublished doctora thesis). Colombia University, New York.

RAND Corporation. (2024). *Teachers in 2024: Burnout, retention, and workplace conditions*. RAND Education and Labor. Retrieved from https://www.rand.org/pubs/research_reports.html

Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, *23*(3), 393-404. doi:10.5465/amr.1998.926617

Rönnström, N. (2015). Educating competitive teachers for a competitive nation?. *Policy Futures in Education*, *13*(6), 732-750. doi:10.1177/1478210315595171

Salakhova, V. B., Masalimova, A. R., Belyakova, N. V., Morozova, N. S., Osipova, N. V., & Prokopyev, A. I. (2021). Competitive teacher for higher education: risk-based models of its development. *Eurasia Journal of Mathematics, Science and Technology Education*, *17*(10). doi:10.29333/ejmste/11187

Schumacker, R., & Tomek, S. (2013). *Understanding statistics using.* Springer.

Sharma, S. K., Mudgal, S. K., Gaur, R., Chaturvedi, J., Rulaniya, S., & Sharma, P. (2024). Navigating sample size estimation for qualitative research. *Journal of Medical Evidence, 5*(2), 133-139. doi: 10.4103/JME.JME_59_24

Sun, B., Yu, X., Yuan, X., Sun, C., & Li, W. (2021). The effect of social perspective-taking on interpersonal trust under the cooperative and competitive contexts: The mediating role of benevolence. *Psychology Research and Behavior Management*, 817-826. doi:10.2147/PRBM.S310557

Sun, J., Zhang, R., & Forsyth, P. B. (2023). The effects of teacher trust on student learning and the malleability of teacher trust to school leadership: A 35-year meta-analysis. *Educational Administration Quarterly*, *59*(4), 744-810. doi:10.1177/0013161X231183662

Tajfel, H. & Turner, J. C. (1979). An integrative theory of inter-group conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of inter-group relations* (pp. 33–47). Belmont, CA: Brooks/Cole.

Tschannen-Moran, M. (2020). *Organizational trust in schools.* Oxford Research Encyclopedia of Education. doi:10.1093/acrefore/9780190264093.013.681

Tschannen-Moran, M., & Gareis, C. R. (2015). Principals, trust, and cultivating vibrant schools. *Societies, 5*(2), 256–276. doi:10.3390/soc5020256

Tschannen-Moran, M., & Hoy, W. K. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust. *Review of Educational Research, 70*(4), 547–593. doi:10.3102/00346543070004547

Tuyet, N. L. H., & Ninh, L. K. (2023). Competition and firm performance: evidence from Vietnam. *RAUSP Management Journal*, *58*(2), 111-124. doi:10.1108/RAUSP-03-2022-0094

Ugli, M. S. N. (2019). Development of professional competitiveness of future teachers. *European Journal of Research and Reflection in Educational Sciences, 7*(10), 111-116.

Uzum, B., Ozdemir, Y., Kose, S., Ozkan, O. S., & Seneldir, O. (2022). Crab barrel syndrome: Looking through the lens of type A and type B personality theory and social comparison process. *Frontiers in Psychology*, *13*, 792137. doi:10.3389/fpsyg.2022.792137

Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice*, *6*(5), 100-110. doi:10.5430/jnep.v6n5p100

Vallerand, R. J., Gauvin, L. I., & Halliwell, W. R. (1986). Effects of zero-sum competition on children's intrinsic motivation and perceived competence. *The Journal of Social Psychology*, *126*(4), 465-472. doi:10.1080/00224545.1986.9713614

Vitcu, A., Lungu, E., Vitcu, L., & Marcu, A. (2007). Multi-stage maximum variation sampling in health promotion programs' evaluation. *Journal of Preventive Medicine*, *15*, 5-18.

Wang, L., Li, F., & Zhang, Y. (2022). Workplace competition and knowledge hiding: A moderated mediation model. *Journal of Organizational Behavior, 43*(2), 253–270. doi:10.1002/job.2598

Williams, W. S. (2020). Black woman at work: A narrative both personal and political. *Women & Therapy*, *43*(1-2), 125-143. doi:10.1080/02703149.2019.1684679

Yıldırım, A., & Şimşek, H. (2019). *[Sosyal bilimlerde nitel araştırma yöntemleri] Qualitative research methods in the social sciences.* Ankara: Seçkin Publishing.

York-Barr, J., & Duke, K. (2004). What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational Research*, *74*(3), 255-316. doi:10.3102/00346543074003255

Zeer, E. F., Tretyakova, V. S., Kurochina, I. A., Bukovei, T. D., & Beresneva, T. V. (2019). Teacher's competitiveness at different stages of professional development. *Humanities & Social Sciences Reviews*, *7*(4), 1108-1119. doi:10.18510/hssr.2019.74151