

Beyond the Classroom Walls: The Case of Israeli Youths' Sense of Group Climate in Online and Offline Educational Environments

KOME – An International Journal of Pure
Communication Inquiry
Volume X Issue Y, p. 0-0.
© The Author(s) 2021
Reprints and Permission:
kome@komejournal.com
Published by the Hungarian
Communication Studies Association
DOI: [10.17646/KOME.75672.67](https://doi.org/10.17646/KOME.75672.67)

Noam Lapidot-Lefler and Michal Dolev-Cohen

Oranim Academic College of Education, ISRAEL

Abstract: The study examined Israeli youths' sense of group climate in online and offline educational settings, i.e., in Instant Messaging (IM) groups organized by homeroom teachers for their respective students and in the physical classroom environment. Participants included 550 students (152 boys, 398 girls), of ages 10–18, who completed an online survey. The findings reveal that the students perceived the classroom climate to be more positive than that of the IM group in which the homeroom teacher is present. Furthermore, the more positive the perceived face-to-face (FtF) classroom climate was, the more positive the perceived IM group climate. In addition, when both class and IM group climates were perceived to be highly positive, a sense of non-violence among the participants was found to be the highest. These findings shed light on the unique phenomena of homeroom teachers who participate with their students in IM groups. Based on the findings, implications for educators and school counsellors are discussed.

Keywords: Adolescence, Group climate, IM Groups, Communication platform, Teacher-student relationship

Introduction

In the past three decades, there have been rapid developments in the field of information technology and accessibility, through the use of computers and the Internet. Different surveys from around the world present a clear picture of the intensive use of online applications among adolescents (Gunter & Gunter, 2019). These data are evidence of a rising trend, according to which the age of smartphone users is decreasing and the percentage of young users is increasing. In this state, when adolescents and children own mobile phones and are accustomed to using them daily, it is only natural that a growing portion of their social interactions would also take place in cyberspace (Shapka, Onditi, Collie, & Lapidot-Lefler, 2018), specifically through instant messaging applications that enable them to conduct private conversations with their peers (Klein, Junior, Barbosa, & Baldasso, 2018). Instant Messaging (e.g., WhatsApp application) is one of the most popular communication platforms among adults and adolescents in Israel (Addi-Racah & Yemini, 2018; Hershkovitz, Elhija, & Zedan, 2019). The Instant Messaging (IM) application enables private or group synchronized conversations, free transfer of photos, videos, and voice-recorded messages, features that attract a great crowd of users (Peter, Valkenburg, & Fluckiger, 2009).

Address for Correspondence: Noam Lapidot-Lefler, email: [noam.lapidot.lefler\[at\]gmail.com](mailto:noam.lapidot.lefler[at]gmail.com),

Article received on the 29th June, 2020. Article accepted on the 3rd September, 2021.

Conflict of Interest: The authors declare no conflict of interest.

The class climate is greatly affected by the relationship between the teacher and the student. It appears that this relationship is perceived by students as being of crucial importance in terms of their enjoyment of learning and their time spent in the school in general (Gest, Welsh, & Domitrovich, 2005). Furthermore, a positive teacher-student relationship plays an important role in facilitating students' optimal development. Hence, these relationships should be characterized by warmth, closeness, and absence of conflict (Driscoll, Wang, Mashburn, & Pianta, 2011).

The current study explored the class climate as expressed in class-wide IM groups managed by the homeroom teacher who is the main educator, supervisor, organizer, and contact person for students and their parents (Roorda, Jorgensen, & Koomen, 2019). These groups can contribute to and have a substantial positive or negative effect on group climate, especially in light of the fact that the online environment of cyberspace affords the removal of constraints. Consequently, the behaviors manifested in these environments include bullying, harassment, and shunning, alongside altruism and support (Lapidot-Lefler & Barak, 2012; Dolev-Cohen & Barak, 2013).

The class-wide IM groups have become a prevalent component in the classroom functioning in Israel and are used as a tool for information transfer between the homeroom teacher and the students within an online social space. Despite its great prevalence in Israel and the discussions on how these groups should be administered and conducted, the IM group dynamics have not yet been investigated from the students' point of view, their sense of the group climate, and especially in terms of the presence or absence of violence therein.

Related Literature

Class Climate and Cyberspace

One of the most significant environments for a young person is the school environment, in which they spend many hours of their day with the same companions; hence, the social and educational experiences that take place in the school environment tend to influence their identity development (Lambert, 1998; Oliver, Lambert, & Mason, 2019). It appears that the class framework gives rise to social processes that are affected by the characteristics of the physical environment, the students, the teachers, and additional organizational characteristics. All of the above influence the unique characteristics of the classroom: the behavioral norms; students' attitudes towards learning, performing chores, democracy, mutual help, and cooperation; as well as their communication patterns and their feelings of belonging (Oliver, Lambert, & Mason, 2019). As for the teacher influence, it was found that teacher-student online communication in times of war, may increase adolescents' wellbeing by providing the students emotional support (Ophir, Rosenberg, Asterhan & Schwarz, 2016). As mentioned, the relationship between the teacher and the students is significant and its role is even more pronounced in the class IM groups that are managed by the homeroom teachers.

The Appeal of Instant Messaging

Instant Messaging (e.g., WhatsApp) is one of the most popular communication applications in Israel (Addi-Racah & Yemini, 2018). It seems that the nature of synchronic-textual communication conducted through instant messaging can be appealing to different people for different reasons. Thus, for example, it was found that people who are shy and find it difficult to create social interactions find it easier to communicate via this medium (Bardi & Brady, 2010). This finding is especially important when examining online communication among

adolescents, who have a great need for social interaction with their peer group (Steinberg, 2008).

Indeed, Valkenburg and Peter (2009) studied the long-term effects of communicating through instant messages on the quality of friendship among 812 Dutch adolescents, ages 10 to 17. Their findings indicated that the use of instant messaging by adolescents encouraged them to expose and share intimate information, which led to a strengthening of their relationships. This result was supported by another study, which examined communication through instant messaging among adult colleagues. That study found instant messaging (IM) to be a convenient platform for offering assistance, as it enabled reciprocity and sharing and intensified social connections (Lin & Chiu, 2011). Dolev-Cohen and Barak (2013) found that IM conversations improved the moods of adolescents who were experiencing emotional distress. This finding supports that of a study that compared IM communication with a stranger with a similar case of face-to-face communication. In both conditions, it was found that the interaction had contributed to the participants' sense of elation, but this positive feeling was more prominent among those who communicated via IM. The researchers explained this finding by noting that in IM, there is no need to impress one's interlocutor visually and that the participants tended to associate IM conversations with socializing (Green, Hilken, Friedman, Grossman, Gasiewski, Adler, & Sabini, 2005). Moreover, teachers' out-of-class communication in WhatsApp was found to be associated with better relationship with students and with better classroom environment (Abd Elhay & Hershkovitz, 2019).

Understanding the Cultural Context of Israeli Youth in the Online and Offline Space

Israel is described as a multicultural society. Although considered a Western industrialized society with mostly individualistic values, the Israeli ethos is characterized as more communal and more collectivist than that of the United States, (Lapidot-Lefler & Hosri, 2016; Sagy, Orr, Bar-On, & Awwad, 2001), emphasizing the central role of family (Goldner, Sachar, & Abir, A. 2019; Lavee & Katz, 2003) and the importance of the collective. The explanation for the latter is the need to rely on the collective in times of national crises, whereas the former is explained in relation to the prominence of the family in the Jewish tradition and religion. Strong and frequent contact with family members and especially with parents is maintained throughout one's life; it is a common practice that, even after marriage, children live near their parents and visit them frequently. These aspects are related to the strong sense of involvement that Israelis have regarding their country and their fellow countrymen (Mayseless & Scharf, 2007).

In line with this communal orientation, there is also a high degree of focus on peer groups. Israelis describe themselves in terms of their peer group frameworks and, from infancy on, children are encouraged to identify with their peer group (Lavee, & Katz, 2003). It is not uncommon for a child to be a part of the same group of peers from infancy to late adolescence. Furthermore, in Israeli culture, children are expected from early on to get along with their peers and to manage their "social problems" without adult interference. The education system emphasizes social cohesion (Scharf & Mayseless 2010).

Interestingly, the relative prominence of collectivism in the Israeli culture does not entail much submissiveness or adherence to rules, orders, or regulations. In fact, questioning and challenging authority is both common and appreciated in Israeli society (Mayseless & Scharf, 2007). Nevertheless, it should be noted that, in general, social relationships of Israeli children resemble those of North American middle-class children in terms of emotional and instrumental aspects (Scharf & Mayseless 2010). Naturally, the relationships that Israeli youths maintain with their classroom peers and teachers are embedded in the culture and narrative of Israeli society. The implications of this cultural context are relevant to Israeli youths' sense of group climate and the potential for violence in online and offline educational environments.

The present study

As the literature in the field proves, many studies have examined different aspects of adolescents' feelings and experiences in the online arena; yet, to the best of the authors' knowledge, no study to date has examined students' sense of group climate and the potential for violence in a school-related IM group that includes the homeroom teacher. The current study relates to the classroom climate in the physical classroom and in the online IM group, with the homeroom teacher present in both realms. Class IM groups are very common in Israel and are used as a tool for information transfer between the homeroom teacher and the students while simultaneously providing an online social space.

This pioneering use of IM technology to extend the reach of the physical classroom is not a common practice in other parts of the world (e.g., North America or Japan). Despite its great prevalence in Israel and although there have been numerous discussions on how it should be administered and conducted, the phenomenon of classroom-based IM groups has yet to be investigated from the point of view of the students, particularly in terms of their sense of group climate and the potential for violence in them. This study is important, not only because it examines a unique phenomenon but also because it can illuminate aspects of students' interactions with the homeroom teacher and with their peers in a realm outside of the school framework, by focusing on the students' perspective and their perceptions.

The focus of this study is on students' sense of the group climate and the potential for violence as they participate in the classroom IM group, in which also the homeroom teacher is present and active. On the basis of previous research (Dolev-Cohen & Barak, 2013; Lin & Chiu, 2011; and others), we hypothesized that:

- (a) Overall, students' IM group climate perceptions would be lower than their classroom climate perceptions, and correspondingly, they would indicate a stronger perception of violence in the virtual environment than in the physical classroom.
- (b) A correlation would be found between students' class-climate perception and their IM group climate perception, such that the more positive the class-climate perception, the more positive too would be their IM group climate perception.

Methods

Participants

The current study included 550 adolescents, 152 boys (27.6%) and 398 girls (72.4%). Students' ages ranged from 10- to 18-years-old ($M = 15.42$ years, $SD = 1.75$); they were attending grades 4 to 12, in junior high schools ($N = 158$, 28.7%) and high schools ($N = 371$, 67.5%). All of the students reported being members of a classroom-based IM group that included their homeroom teacher and 97% of them ($N = 532$) reported participating actively in the group. The older participants (aged 16-18) were recruited via Facebook advertisements. The ad invited them to complete an anonymous online questionnaire for an academic research project. Those who chose to click on the link were directed to a landing page, where they found information about the study and were asked to obtain their parents' consent. Before they were given access to the questionnaire, they had to indicate that their parents did not object to their participation. Younger participants (aged 10-15) were recruited via their parents.

Instruments

The Short Classroom Environment Scale

The Classroom Environment Scale questionnaire (Moos & Trickett, 1987) was administered, to measure participants' perceptions of the classroom climate. The short CES, which was translated into Hebrew (and then back into English, by the researchers), included 36 items measuring three dimensions: Relationship Dimension, Personal Growth, and System Maintenance and Change. For the sake of the study, participants were requested to fill out the questionnaire in its entirety, but only the Relationship Dimension and System Maintenance and Change scales were actually used for hypothesis-testing in the current research. The scale items referred to respondents' perceptions of the environment climate in the classroom and of the relationship between the students and the teacher. For example: "Students in the class get to know each other really well", "This teacher spends very little time just talking with students." Items were presented in a true/false response format.

Due to a low internal consistency score, exploratory factor analysis was conducted (principal components with varimax rotation). Its results were inconclusive and did not match the theory underlying the Classroom Environment Scale. Hence, only the two central dimensions were used: the Relationship Dimension ($\alpha=.73$) including all three subscales (*Involvement*, *Affiliation*, and *Teacher Support*), and System Maintenance and Change Dimension ($\alpha=.62$) including three subscales (*Order and Organization*, *Rule Clarity*, and *Innovation*), but excluding the subscale of *Teacher Control*. The total score was calculated for the classroom climate ($\alpha=.82$). Items were worded so that higher scores reflect a more positive class climate.

Applying the Short Classroom Environment Scale to the instant messaging environment

This questionnaire was administered to measure participants' perceptions of the climate of the IM group, in which the homeroom teacher was present and active. Exploratory factor analysis was used (principal components with varimax rotation) and yielded inconclusive results. In light of the items that were used, two dimensions were calculated as well as the total score: Relationship Dimension – $\alpha=.68$ (8 items); System Maintenance and Change Dimension – $\alpha=.60$ (6 items, without items 9, 10); Total score – $\alpha=.70$. Scale means were calculated such that higher scores reflect a more positive climate.

Measuring the perception of non-violence in the instant-messaging group.

The Perception of non-Violence Questionnaire (Benbenishty, Astor, & Zeira, 2003) was used to measure participants' perception of non-violence in the IM group. The questionnaire includes four statements, e.g., "I usually feel safe in the classroom-based IM group in which the teacher is a member." Using a 5-point Likert-like scale, ranging from 1 ("not at all") to 5 ("very much"), participants indicated the extent to which they agreed with the statements of the questionnaire items.

Correlations between the four items ranged between $r = .30$ to $r = .62$ ($p < .001$). A principal components factor analysis revealed one factor, which explained 59.66% of the variance (Eigenvalue = 2.39). Thus, the total score was composed of the item means, such that higher scores reflect a greater sense of non-violence in the IM environment.

Procedure

The questionnaire was distributed via Facebook, according to age groups. Individuals who expressed their willingness to participate in the study received the online questionnaires asking about their experience in the IM group with their classmates and teacher. Participants were assured that the information they provided would remain anonymous and confidential.

Data Analysis

Pearson correlations were used to assess the relationships between the climate in the classroom and in the IM environment. T-tests were employed to assess the differences between them. The perceived violence in the IM group was described in terms of frequencies and percentages.

Multiple regressions were used to predict the perception of non-violence in the classroom and in the IM groups, adjusting for gender and grade level. Finally, using the standard deviations, four subgroups were defined (2x2), consisting of positive and negative climate perceptions both in the physical classroom and in the IM group. Univariate analysis of variance was used to assess differences in the perceptions of non-violence in the IM group between these four subgroups.

Ethical considerations

The current study examined youths' sense of group climate, which required the maintaining of participants' anonymity and secrecy. Therefore, participants were ensured full confidentiality of the information collected during the research. All the students reported belonging to an IM class group of which the homeroom teacher was a member. Prior to participation, participants were asked to indicate that their parents did not object to their filling out the questionnaire. All the participants chose to take part in the study and stated that their parents did not express any objection to their participation. Participants were not identified in any way. Furthermore, the participants received the researcher's contact details, so that they could obtain additional information, a copy of the results, or other details of interest, in accordance with the customary ethical standards.

Results

Classroom and Instant Messaging Environments

The findings of the study indicate significant differences between the mean scores attributed to the classroom climate and those attributed to the climate in the IM groups (see Table 1), revealing a higher positive climate in the classroom than in the IM group. Overall, means are moderate, being about 0.60 for the classroom and 0.50 for the IM group (range 0–1). Further, a significant correlation was found between the perceived class climate and the perceived IM group climate, such that the higher the class climate, the higher too was the IM group climate, as perceived by the students (Relationship – $r = .58, p < .001$, System Maintenance and Change – $r = .40, p < .001$, Total score – $r = .59, p < .001$). In addition, positive and significant correlations were found between Relationship and System Maintenance and Change, both in the classroom environment – $r = .58 (p < .001)$, and in the virtual environment – $r = .27 (p < .001)$.

Table 1. Means and Standard Deviations of Classroom Environment and IM Group Environment ($N=550$)

Dimension	Classroom Environment M (SD)	IM M (SD)	Differences $t(549)$
Relationship Dimension	0.62 (0.23)	0.53 (0.27)	8.34***
System Maintenance and Change Dimension	0.57 (0.20)	0.48 (0.28)	8.14***
Total Score	0.61 (0.19)	0.51 (0.22)	13.31***

*** $p < .001$

Perceived classroom and IM climates did not differ by gender. They generally did not differ by grade level either (junior high versus high school), except for in the dimension of System Maintenance and Change in the IM environment, which junior high school students perceived to be higher ($M = 0.52$, $SD = 0.28$) than did high school students ($M = 0.45$, $SD = 0.27$) ($t(527) = 2.68$, $p = .008$). All gender by grade level interactions were non-significant.

Perceived non-violence in the IM group

The total mean score for perceived non-violence was rather high $M = 4.01$ ($SD = 0.96$), on a scale of 1 to 5, indicating that overall, students considered the IM group climate to be non-violent. A review of the results presented in Table 2 reveals that about 80% of the students felt safe in the IM group (which included the homeroom teacher), and about the same percent (78%) in the IM group felt that the homeroom teacher cared about non-violence – either “quite a lot” or “a lot.” Nearly two-thirds of the students felt that the homeroom teacher was able either to manage students who misbehaved in the IM group (66%) or took active steps to lessen instances of violence in the group (64%). About 9% to 17% of the students considered the level of violence that occurred in such instances to be moderate, and about 9% to 20% of the participants viewed such instances as either involving a very low level of violence or non-existent.

About 9% to 17% of the students assessed the presence of violence components as moderate, and about 9% to 20% assessed them as not existent or as present, but only to a little extent. Categories 4 and 5 in the questionnaire were combined to reflect a low level of violence or non-existence of violence; participants responses indicated moderate level of category 3 components, and categories 1 and 2 were combined to reflect high levels of violence (as shown in Table 2).

Table 2. Distribution of the perception of Non-violence in the IM group ($N = 550$)

In the IM group:	Not at all/ A little N (%)	Moderately N (%)	Quite a lot/ A lot N (%)
I feel safe	48 (8.7)	59 (10.7)	443 (80.5)

Homeroom teacher cares about non-violence	71 (12.9)	49 (8.9)	430 (78.2)
Homeroom teacher handles misbehaving students	93 (16.9)	96 (17.5)	361 (65.6)
Homeroom teacher acts to lessen violence	111 (20.2)	88 (16.0)	351 (63.8)

The total scores of perceived violence in the IM group did not differ by gender or grade level, nor by their interaction. Next, two multiple regressions were calculated, to assess the relationships between perceived non-violence in the IM group and the perceived climate in both the classroom and in the IM environment, beyond the effects of gender and grade level (see Table 3).

Table 3. Hierarchical Multiple Regressions to Predict the Perception of non-Violence in the IM Group ($N=550$)

	Perception of non-violence in the IM group					
	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β
	Prediction by general scores			Prediction by dimension scores		
Gender	-0.06	0.08	-.03	-0.08	0.08	-.04
Age group	0.11	0.07	.06	0.14	0.07	.07
Classroom Environment total score	1.81	0.22	.36***	--	--	--
IM Environment total score	1.21	0.19	.28***	--	--	--
Classroom Relationship Dimension	--	--	--	1.05	0.20	.25***
Classroom System Maintenance and Change Dimension	--	--	--	0.79	0.21	.17***
IM Relationship Dimension	--	--	--	0.40	0.16	.11*
IM System Maintenance and Change Dimension	--	--	--	0.78	0.13	.23***
Adj. R^2	.31			.32		
	$F(4, 545) = 63.39, p < .001$			$F(6, 543) = 43.91, p < .001$		

* $p < .05$, ** $p < .01$, *** $p < .001$

Results reveal that classroom and IM climates were significantly and positively related to perceptions of non-violence in the IM group, beyond the effects of gender and grade level. The total scores of both the classroom and the IM climates were significant (in relation to perceived non-violence), as were the total scores of the four dimensions (Relationship and System Maintenance and Change X classroom and IM). The total IM group climate score explained an additional 5% of the variance ($p < .001$) in the perception of non-violence in the IM group, beyond the explanatory effect of the total classroom climate score. Likewise, the dimensions of Relationship and System Maintenance and Change in the IM group explained an additional 5% of the variance ($p < .001$) in the perception of non-violence in the IM group, beyond the explanatory effect of the total classroom climate scores.

Finally, an attempt was made to assess whether the gap between the classroom and the IM climates was related to the perception of non-violence in the IM group. For this purpose, four subgroups were composed:

1. Low classroom climate and low IM climate (both one SD below the mean)
2. IM climate scores higher than the classroom climate scores (with a difference of at least one SD), yet overall these scores were neither high nor low
3. Classroom climate scores higher than the IM climate scores (with a difference of at least one SD), yet overall these scores were neither high nor low
4. High classroom climate scores and high IM climate scores (both one SD above the mean).

This procedure yielded a classification that included 424 participants (77.1% of the sample). The remaining participants rated both the classroom and the IM climates as neither high nor low, but with no significant difference between them.

A significant difference was found in the distribution of the participants in the four subgroups ($\chi^2(4) = 72.38, p < .001$). A significantly low percentage corresponded to the subgroup of low classroom climate scores and high IM climate scores ($t(549) = 5.70, p < .001$) and a significantly high percentage corresponded to the subgroup of high classroom and low IM climates ($t(549) = 3.13, p = .002$), compared to the expected even distribution (see Table 4). Table 4. Perceived Non-violence in the IM Environment by the Joint Distribution of Classroom and IM Environments ($N = 424$)

Table 4. Perceived Non-violence in the IM Environment by the Joint Distribution of Classroom and IM Environments ($N = 424$)

Scores for Perception of Non-violence:		<i>n</i>	%	<i>M</i>	<i>SD</i>
classroom environment	IM environment				
Low	Low	95	17.3	3.16	1.03
Low	High	42	7.6	3.77	1.20
High	Low	161	29.3	4.06	0.81
High	High	126	22.9	4.55	0.67

The perception of non-violence in the IM group was significantly different between the four defined subgroups of classroom and IM environments ($F(3, 418) = 48.26, p < .001, \eta^2 = .257$). Posthoc Tukey analysis revealed that the perception of non-violence was the lowest when both environments were assigned low climate scores and highest when both environments were assigned high climate scores (see Table 4). The perception of non-violence was in between these values when one environment was evaluated as low and the other as high.

Discussion

The purpose of this study was to examine students' sense of group climate and the perception of violence in online and offline educational environments, specifically, in the classroom and in an online, class-based IM-group environment. The study was conducted within the cultural context of Israeli society, where (as mentioned above, Hershkovitz, Elhija, & Zedan, 2019) homeroom teachers typically initiate and participate in an IM group, which they establish specifically for use by the students in their respective classes. Due to this unique phenomenon, we chose to relate to the manner in which the students experience the two environments they share with the homeroom teacher: the physical one in the classroom and the online one in the IM group.

Hypothesis (A): A Sense of Poorer Group Climate and a Greater Perception of Violence in the Online Environment

Although there is a connection between the physical and the online environment and they are often a reflection of each other, the physical environment was valued at a higher quality than the online environment, thus confirming Hypothesis 1. In addition, participants perceived violence to be lowest when both class and IM group climates were strongly positive. This finding is highly important for understanding the students' experience in the IM group, which, as mentioned, has become an integral part of the school experience and a major means of communication with the homeroom teacher. A finding of an earlier study, which demonstrated that students' experience of the classroom climate is related to their scholastic success in school (Bulach, 1995), can further explain the current study's finding of a sense of poorer group climate and greater perception of violence in the online environment, where the role of scholastic success is relatively marginalized. Furthermore, a study that evaluated an intervention for improving the class climate provides evidence that student involvement and group consolidation are factors that play a significant role in students' perception of the group (in this case the physical classroom) climate (Shechtman, Weisery, & Kurtz, 1993).

Hypothesis (b): The Relationship between the Physical and the Online Environments: Reflection and Resonance

The findings of the study indicate a correlation between the perceived classroom climate and the perceived climate in the IM group, so that the higher the perceived classroom climate, the higher too is the perceived IM group climate, thus confirming Hypothesis 2. We found a positive correlation between the online and the physical environment in terms of students' sense of group climate and potential for violence. When the climate scores in the two environments were high, the students' perception of violence was the lowest (i.e., they felt safe), and when the climate scores in the two environments were low, the perception of violence was the highest (i.e., they felt the environment was unsafe).

This finding was repeated also with reference to both dimensions that were examined and which characterize the class climate: the dimension of Relationship with the teacher and the System Maintenance and Change dimension. It seems, therefore, that the perceived quality of climate in the cyberspace group is a reflection of the quality of climate perceived in the physical space. These findings support those of other studies in the field, which found correlations between various phenomena in these two spaces. For example, a relationship was found between cyberbullying and face-to-face bullying: those who experience cyberbullying also experience bullying in the physical space (Lapidot-Lefler & Dolev-Cohen, 2014). However, while the climate quality in the classroom is reflected in the quality of climate perceived online, the findings of the current study indicate that there is a difference in the extent of the positive or negative climate perceptions between the physical and the online groups. Thus, in the IM group, the rating of the positive climate was lower than the rating of the positive climate in the physical environment. The reason may be that online environment and online interactions are characterized by authenticity and bluntness, resulting from the process of online disinhibition (Lapidot-Lefler & Barak, 2012). This interpretation is supported by literature from recent years, whereby studies found that children and teens experience online bullying mostly from peers whom they know and with whom they share the physical space in the school or classroom (Lapidot-Lefler & Dolev-Cohen, 2014; Mishna, Cook, Gadalla, Daciuk, & Solomon, 2010). Therefore, it is not unlikely that also in these class-based IM groups, students might experience incidents of bullying (hence the importance of the homeroom teacher's presence in these online groups). It seems that the quality of the climate in cyberspace reflects the quality of the climate

in the physical space and vice versa. This relationship suggests that student-teacher relations in an online IM environment take on a social aspect. Hence, we may draw the conclusion that within the cultural context of Israeli society, where teachers initiate, participate in, and are in charge of a class-based IM group (Hershkovitz, Elhija, & Zedan, 2019), the boundaries between the classroom and the virtual environment are becoming less patent.

Implications

The role of the teacher

It seems that teachers have an important role in creating a safe space for students, and when they establish a class group through an IM application, they should strive to create a supportive and secure climate, with clear rules of behavior and interaction, to allow students to feel safe. Indeed, the current findings revealed that the majority of participants felt secure in the online environment and, it should be emphasized, they felt that the homeroom teacher played an active role in preventing or lessening the level of violence. Nevertheless, there was still a substantial portion of the students who felt unsafe and criticized the teacher's behavior in the online environment.

This finding is highly important and merits the attention of the professional community, especially in light of a previous study, which found that a high level of teacher competence correlates with good classroom relationships and fewer social problems (Breeman, Wubbels, Van Lier, Verhulst, van der Ende, Maras, Hopman, & Tick, 2015). It was also shown that teachers' involvement in programs for reducing classroom violence and especially the number of victims among the peer group is highly important (Guimond, Brendgen, Vitaro, Dionne, & Boivin, 2015). Although the importance of the teacher's role in monitoring and maintaining group safety has been established in the professional literature, the manner in which their role can be extended beyond the classroom walls remains unclear, especially in Israeli society, where the boundaries between adults and youths are less pronounced than in other cultures and the education system emphasizes the importance of social cohesion (Scharf & Mayseless 2010).

Study Limitations and Suggestions for Future Studies

The existence of clarity and explanation with respect to the nature of online interactions can contribute to the development and implementation of a clear set of rules intended to guide the behaviors of the students and the homeroom teacher in the IM group, so that the students feel safer. This study used a non-random sample. Further, participants in the current study responded to a Facebook ad published in the accounts of students of ages 10 to 18 ($M = 15.42$), offering the opportunity to participate in the study. However, given that the participants remained anonymous and did not meet the researchers, there is a chance that some of the participants are not in the predefined age range. Nonetheless, it may be assumed that even if this were so, these would be isolated and negligent cases that do not modify the significant study results. Future studies could add a qualitative methodology using semistructured interviews with the students, to thoroughly probe their experience. In addition, investigating teachers' and parents' perceptions regarding students' IM-based interactions may prove fascinating and could expand our understanding of the nature of both online and face-to-face communication between teachers and students.

Conclusion

This study has examined the climate of online IM groups consisting of homeroom teachers and their students, a common practice in the Israeli educational framework, and compared this with the class climate in the physical space. Thus, it has expanded our understanding of the relationship between the group climate and perceptions of violence in both the physical and the virtual environments (with the teacher present in both), as well as our understanding of the relationship between the physical and virtual spaces in which students and teachers interact. In an age when virtual interpersonal communication is prevalent and there exists a gap between the ways it is perceived by students compared to teachers' and parents' perceptions, there is clearly a need to gain an in-depth understanding of the implications that using this medium has for students' wellbeing and, consequently, its optimal frequency of use and role in school life. Furthermore, in these groups, given that the younger generation is often more familiar with the platform and its milieu than are the members of the older generation, the conduct of the teacher may model that of the students, which, in turn, underscores the teachers' need for clear instructions about maintaining rules of (their own and others') conduct in the online environment. If delivered in an organized and constructive manner, such guidelines could help teachers maintain a significant and educational role also in the virtual environment of the online class IM group. Likewise, developing a systematic educational program that clarifies the advantages and the difficulties in online communication, so as to support students in the online environment from a young age and throughout their schooling years, could lead to increased awareness and better communication between teachers and their students in the different environments of the educational experience.

References

- Abd Elhay, A., & Hershkovitz, A. (2019). Teachers' perceptions of out-of-class communication, teacher-student relationship, and classroom environment. *Education and Information Technologies*, 24, 385-406. [CrossRef](#)
- Addi-Raccah, A., & Yemini, M. (2018). What is up? Parental WhatsApp discussion groups in diverse educational settings in Israel. *Multicultural Education Review*, 10, 310–326. [CrossRef](#)
- Bardi, C. A., & Brady, M. F. (2010). Why shy people use IM: Loneliness and other motives. *Computers in Human Behavior*, 26, 1722–1726. [CrossRef](#)
- Benbenishty, R., Astor, R. A., & Zeira, A. (2003). Monitoring school violence: Linking national-, district-, and school-level data over time. *Journal of school violence*, 2, 29-50. [CrossRef](#)
- Breeman, L. D., Wubbels, T., Van Lier, P. A. C., Verhulst, F. C., Van der Ende, J., Maras, A., Hopman, J. A. B., & Tick, N. T. (2015). Teacher characteristics, social classroom relationships, and children's social, emotional, and behavioral classroom adjustment in special education. *Journal of School Psychology*, 53, 87–103. [CrossRef](#)
- Bulach, C. R. (1995). An Investigation of Variables Related to Student Achievement. *Mid-Western Educational Researcher*, 8, 23-29.
- Dolev-Cohen, M., & Barak, A. (2013). Adolescents' use of IM as a means of emotional relief. *Computers in Human Behavior*, 29, 58-63. [CrossRef](#)
- Driscoll, K. C., Wang, L., Mashburn, A. J., & Pianta, R. C. (2011). Fostering supportive teacher–child relationships: Intervention implementation in a state-funded preschool program. *Early Education & Development*, 22, 593-619. [CrossRef](#)

- Gest, S. D., Welsh, J. A., & Domitrovich, C. E. (2005). Behavioral predictors of changes in social relatedness and liking school in elementary school. *Journal of school psychology, 43*, 281-301. [CrossRef](#)
- Goldner, L., Sachar, S. C., & Abir, A. (2019). Mother-Adolescent Parentification, Enmeshment and Adolescents' Intimacy: The Mediating Role of Rejection Sensitivity. *Journal of Child and Family Studies, 28*, 192-201. [CrossRef](#)
- Green, M. C., Hilken, J., Friedman, H., Grossman, K., Gasiewskj, J., Adler, R., & Sabini, J. (2005). Communication Via Instant Messenger: Short-and Long-Term Effects. *Journal of Applied Social Psychology, 35*, 445–462. [CrossRef](#)
- Guimond, F. A., Brendgen, M., Vitaro, F., Dionne, G., & Boivin, M. (2015). Peer victimization and anxiety in genetically vulnerable youth: The protective roles of teachers' self-efficacy and anti-bullying classroom rules. *Journal of abnormal child psychology, 43*, 1095–1106. [CrossRef](#)
- Gunter, B., & Gunter, B. (2019). *Social Risks and Mobile Phones', Children and Mobile Phones: Adoption, Use, Impact, and Control* (pp. 99-120). Emerald Publishing Limited.
- Hershkovitz, A., Elhija, M. A., & Zedan, D. (2019). WhatsApp Is the Message: Out-of-Class Communication, Student-Teacher Relationship, and Classroom Environment. *Journal of Information Technology Education, 18*.
- Klein, A. Z., Junior, J. C. D. S. F., Barbosa, J. L. V., & Baldasso, L. (2018). The Educational Affordances of Mobile IM (MIM): Results of WhatsApp® Used in Higher Education. *International Journal of Distance Education Technologies (IJDET), 16*, 51-64.
- Lambert, L. (1998). *Building leadership capacity in schools*. ASCD.
- Lapidot-Lefler, N., & Barak, A. (2012). Effects of anonymity, invisibility, and lack of eye-contact on toxic online disinhibition. *Computers in Human Behavior, 28*, 434-443. [CrossRef](#)
- Lapidot-Lefler, N., & Dolev-Cohen, M. (2014). Differences in Social Skills among Cyberbullies, Cybervictims, Cyberbystanders, and Those Not Involved in Cyberbullying. *Journal of Child and Adolescent Behavior, 2*, article 149.
- Lapidot-Lefler, N., & Hosri, H. (2016). Cyberbullying in a diverse society: comparing Jewish and Arab adolescents in Israel through the lenses of individualistic versus collectivist cultures. *Social Psychology of Education, 19*, 569–585. [CrossRef](#)
- Lavee, Y., & Katz, R. (2003). The family in Israel: Between tradition and modernity. *Marriage & Family Review, 35*, 193–217. [CrossRef](#)
- Lin, C. P., & Chiu, C. K. (2011). Understanding helping intention and its antecedents among IM users. *Online Information Review, 35*, 386-400. [CrossRef](#)
- Mayselless, O., & Scharf, M. (2007). Adolescents' attachment representations and their capacity for intimacy in close relationships. *Journal of research on adolescence, 17*, 23-50. [CrossRef](#)
- Mishna, F., Cook, C., Gadalla, T., Daciuk, J., & Solomon, S. (2010). Cyberbullying behaviors among middle and high school students. *American Journal of Orthopsychiatry, 80*, 362-374. [CrossRef](#)
- Moos, R. H., & Trickett, E. J. (1987). *Classroom environment scale manual*. Palo Alto, CA: Consulting Psychologists Press.
- Oliver, R. M., Lambert, M. C., & Mason, W. A. (2019). A Pilot Study for Improving Classroom Systems Within Schoolwide Positive Behavior Support. *Journal of Emotional and Behavioral Disorders, 27*, 25-36. [CrossRef](#)
- Ophir, Y., Rosenberg, H., Asterhan, C. S., & Schwarz, B. B. (2016). In times of war, adolescents do not fall silent: Teacher–student social network communication in wartime. *Journal of adolescence, 46*, 98-106. [CrossRef](#)

- Peter, J., Valkenburg, P. M., & Fluckiger, C. (2009). Adolescents and social network sites: identity, friendships and privacy. *Kids online: Opportunities and risks for children*, 83-94.
- Roorda, D. L., Jorgensen, T. D., & Koomen, H. M. (2019). Different teachers, different relationships? Student-teacher relationships and engagement in secondary education. *Learning and Individual Differences*, 75, 101761. [CrossRef](#)
- Sagy, S., Orr, E., Bar-On, D., & Awwad, E. (2001). Individualism and collectivism in two conflicted societies: Comparing Israeli-Jewish and Palestinian-Arab high school students. *Youth & Society*, 33, 3-30. [CrossRef](#)
- Scharf, M., & Mayseless, O. (2010). Finding the authentic self in a communal culture: Developmental goals in emerging adulthood. *New Directions for Child and Adolescent Development*, 2010(130), 83-95.
- Shapka, J. D., Onditi, H. Z., Collie, R. J., & Lapidot-Lefler, N. (2018). Cyberbullying and cybervictimization within a cross-cultural context: A study of Canadian and Tanzanian adolescents. *Child development*, 89, 89-99. [CrossRef](#)
- Shechtman, Z., Weisery, L., & Kurtz, H. (1993). A values clarification intervention aimed at affective education. *The Journal of Humanistic Education and Development*, 32, 30-40.
- Steinberg, L. (2008). *Adolescence*. Boston: McGraw-Hill.
- Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & behavior*, 7, 321–326. [CrossRef](#)
- Valkenburg, P. M., & Peter, J. (2009). The effects of IM on the quality of adolescents' existing friendships: A longitudinal study. *Journal of Communication*, 59, 79–97. [CrossRef](#)