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Self control and a sense of social belonging as moderators of the link between poor subjective wellbeing and aggression among Arab Palestinian adolescents in Israel

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Abstract

The present study focuses on aggressive behavior among Arab Palestinian adolescents in Israel. 397 adolescents of 7th – 12th grades were examined, and two main assumptions were tested. The first assumption focused on the link between mental wellbeing and aggression, which was assumed to be negative. The second assumption dealt with personal and social resources, examining the contribution of self control skills and social belonging as violence reducing resources. We found that self control skills indeed moderate the link between poor subjective wellbeing and aggression. Both study assumptions were corroborated and the study may have applicative implications emphasizing the importance of developing self control skills as a means of reducing aggressive behavior.

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1. Introduction

The focus of recent studies has moved from studying the phenomenon of violence per se, to the study of resources or forces capable of moderating such behavior (Crick & Dodge, 1994; Dodge & Petit, 2003; Mischel & Shoda, 1995; Tremblay & Nagin, 2005). Numerous studies indicated the moderating effect of developing values, a sense of social belonging and social purposes among adolescents, on reducing aggressive behavior (Eron & Huesman, 1984; Haapasalo et al., 2000; Hastings et al., 2000; Kochanska & Aksan, 1995; McGinley & Carlo, 2006; Tremblay et al., 1992; Vitaro et al., 1990).

The choice of adolescent Arab population resulted from three main considerations: One – the information about Arab population is rather scarce, and there is room to expand it. Second – aggression was found especially high

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among this age group, and third – the knowledge about Arab population in general is extremely limited. This population, living in rather poor social wellbeing – compared to Jewish population – is therefore at much risk of developing aggression and violence.

Aggression

In the course of years, several definitions were proposed for the term “aggression”. One of them, common at present, expands the general term of hurting other people – used in the past – to include also reference to the element of the intentions of the hurting person, as well as the victim’s position. According to this definition, aggression is described as ‘behavior directed at another individual with an intention to cause harm’ (Anderson & Bushman, 2002a).

A large number of explanations were proposed to aggressive behavior. Some of them related to aggression as an innate instinct of man (Freud, 1924; Lorenz, 1966). Another emphasized the environmental aspect, regarding frustration a pre-condition for aggressive behavior (Dollard, Doob, Miller & Mowrer, 1939). The theory of social learning, considered one of the main theories in the research of aggression, incorporated behavioral and cognitive aspects, regarding aggressive behavior as a social behavior acquired by a process of learning by conditioning or imitation (Bandura, 1973). Later on, Bandura et al. (2001) suggested a cognitive-social model of developing aggressive behavior, emphasizing in interaction between internal processes and the environment, with further emphasis on cognitive, emotional and behavioral processes, the element of self efficacy and a person’s faith in controlling various aspects of life.

The model of social info- processing, which guided us in the present study, gives us an integrative framework for both above mentioned theories, describing decision making as a circular process, resulting in social behavior. The process starts with information about a social situation, continues with processing and ends in action taken to deal with the situation. This process consists of six steps: Encoding internal and social clues, interpreting these clues, looking for different alternative responses, assessing possible responses, decision making and action.

Studies have shown that aggressive and non-aggressive children differ in the stages of social info- processing (Dodge, Petit, McClusky & Brown, 1986; Kendall, 1995). Proactive and reactive aggression relate to distortions in the different stages of social info-processing (Crick & Dodge, 1996; Dodge & Coie, 1987). Reactive aggression relates to difficulties in the first two stages of info-processing (encoding and clue interpretation) (Crick & Dodge, 1996; Dodge & Coie, 1987; Schwartz et al., 1998). On the other hand, proactive aggression relates to difficulties in the three last stages of info-processing (target setting, possible responses and actual response).

In our present study, we will focus on aggression, according to its three main elements: Hostile thoughts (cognitive aspect), negative feelings and aggressive behavior (Buss & Perry, 1992).

The **element of hostility** – the first one - relates to permanent negative thinking of a person on their environment (Anderson & Bushman 2002a). Such negative thinking is characterized by the concept of an unfair, menacing world, with people acting out of egotistic motives – thus cannot be trusted (Buss, 1961).

Some studies indicated a clear link between hostile thoughts in students and aggressive behavior (Bandura et al., 2001; Crick & Dodge, 1994). According to Dodge’s model (2002) of social info-processing, at the stage of encoding and interpreting the clues – a person is required to examine and assess the intentions of another person, and based on this assessment they will come to conclusions and determine their responses. The assumption, as per this model, is that people with hostile thoughts tend to interpret situations negatively, and attribute hostile intentions to others, thus causing them to react aggressively (Crick & Dodge, 1994; Hubbard et al., 2001).

The second element is **feelings of anger as an emotional component of aggression**. Studies report a link between the capacity to control anger and aggressive behavior, with anger considered as a strong predictor of aggressive behaviour.

The **third element is behavioral** and includes **physical and verbal aggression**. Physical aggression is defined as hurting someone bodily, by hand or by instruments, causing pain to the other party (Buss, 1961). Verbal aggression, on the other hand, relates to verbal messages transferred to others, attempting to cause emotional pain, undermine their status and self-esteem (Infante, 1995).

Subjective wellbeing

During the last years, research dealing with subjective wellbeing has won great momentum, resulting from the need to improve and reinforce man's satisfaction with life. Subjective wellbeing is a term of importance, mainly when the population concerned is living under duress and hardship, followed by damage to their wellbeing (Hobfoll, 1989; Natving, Albreksten & Qvarnstrom, 2003; Torsheim & Wold, 2001).

Subjective wellbeing relates to man's subjective assessment of the quality of life, happiness and satisfaction, as well as the quality of inner experiences, with regard to different areas of life (Diener, 1984). It includes elements, such as happiness, satisfaction, gratification and quality of life (Diener, 1984). These elements relate to cognitive, effective responses of the individual to experiences in life (Diener 1984; Veenhoven, 1991).

The present study will relate to the issue of mental wellbeing among students, taking into consideration the three elements of mental wellbeing, as defined by Watsonm Clark & Tellegan (1998) and Diener, Emmons, Larson & griffin (1985), who related to positive effects, negative effects and happiness and satisfaction with life.

Several studies have been conducted, indicating positive correlation between mental wellbeing and the sense of controlling life (McConnell et al., 2005; Veenhoven, 1991), the ability to cope with pressures and conflicts (Argyle, 1987), the tendency to experience less negative feelings, in addition to positive link between social belonging and physical and mental wellbeing (Spiegel, Bloom, Bolger, Kraemer & Gottheil, 1989). People with high mental wellbeing feel more in control of their life, and deal more effectively with stressful situations, setting their purposes in life (Keyes & Ryff, 2000; Veenhoven, 1991).

Therefore we can sum up and say that adolescents with poor mental wellbeing may develop negative symptoms of anxiety, depression, stress and poor self control, with a higher tendency to aggressive behavior. On the other hand, adolescents with high wellbeing may have higher self control and a more effective capacity in managing different social situations, combined with flexible thinking and problem solving – which in turn may reduce their level of aggression.

Self control

This term describes a person's behaviors done by free choice, at the same time giving up a more appealing behavior in favor of a more desirable one (Thoresen & Mahoney, 1974). This definition includes two aspects: Free choice - behavior chosen by a person after realizing its importance, and not because of some outside pressure or lack of any other choice; choosing between two opposing behaviors, when a person has to choose from several options – between the important (or effective) behavior and the more desirable for him at that moment (Ronen, 1997:14).

Previous studies pointed out a connection between acquiring self control skills and the capacity to cope with different types of stress, such as anxiety and pressure (Hamama, Ronen & Feigin, 2000; Ronen & Rosenbaum, 2001). Self control skills are meant to reduce aggressive behavior at school, and increase the capacity of coping (McGinnis & Goldstein, 1997; Ronen, 1997, 2003, 2005). Deficiencies in self control skills in children were found to be related to aggressive, hyperactive and impulsive behaviors (Ronen, 1997). It was also found that aggressive children, due to such difficulties in self control, find it hard to plan their responses, which in turn are impulsive and uncontrolled, increasing the probability of aggressive behavior (Eisenberg, 1994, 1996; Pope & Bierman, 1999; Ronen, 1997, 2003).

According to the social information processing model, one can argue that children with self control skills have the capacity to plan and think in a more balanced manner, expressed in encoding social codes in a more regulated way, in interpreting events in a more realistic way and in choosing less aggressive responses accordingly, unlike children with faulty self control skills (Dodge et al., 2002). Children with self control have the capacity to regulate their emotions, not expressing negative emotions by overt aggression (Dodge, 1989; Eisenberg et al., 1994; Eisenberg et al., 1996; Eisenberg et al., 1998).

Several studies conducted on children and adolescents clearly indicated a strong link between developing self control skills, such as postponement of satisfaction, problem solving, cognitive construction and reduced aggressive behavior (Ayduk et al., 2000; Gyurak & Ayduk, 2008; lair, Denham, Kochanoff & Whipple, 2003; Weisbord, 2007).

A sense of belonging

Belonging is a term describing our position, relative to the community or a certain group. The person then has a sense of belonging, commitment, an integral and accepted part of a group of people. A person defines his identity beyond himself, when the collective identity has a meaning. Usually, this person shares with the group the values, goals, experiences and other feelings, combined with a sense of respect, commitment and support, in addition to mutuality and cooperation, which are extremely significant (Levine, 2000).

The sense of belonging is perceived as a basic human need (Baumeister & Leary, 1995) and people are motivated to satisfy this need. A search for interaction with others gives a person a sense of bonding and belonging. The need to be connected socially is a basic human motive, therefore, due to the importance of this feeling, people who lack it may experience negative results, such as stress and difficulties in adaptation (Baumeister & Leary, 1995; McDonald & Leary, 2005).

There are an increasing number of studies emphasizing the importance of the sense of social belonging in improving mental wellbeing and happiness. On the other hand, rejection and social isolation are perceived as painful and relate to a group of negative experiences, which include anxiety, depression, anger and guilt (MacDonald & Leary, 2005). Anderman & Angerman (1999) in their study, indicated positive connections between positive feelings and a sense of school and social belonging, and the social purposes thereof among 6th grade students.

Social belonging often predicts positive results, when there is a positive link between social belonging and mental and physical wellbeing (Bolger, Zuckerman, & Kessler, 2000; Spiegel, Bloom, Kraemer & Gottheil, 1989).

A sense of social belonging may contribute to social adaptation of adolescents. There is evidence of the alleviating effects of the sense of belonging in reducing risk behavior among adolescents, including delinquency, drug abuse, cigarettes and alcohol (Napoli, Marsiglia & Kulis, 2003). A study examining the link between belonging and behavioral problems in a group of peers, found negative link between the need for belonging and introverted or extroverted behavior problems.

The purpose of the present study is, therefore, to examine the link between positive and negative feelings, a sense of happiness and aggression, as well as examine how self control skills and the need for belonging may moderate this link.

Assumptions

1. There will be a link between hostile thoughts, anger and physical aggression. Control of anger may reduce the intensity of the link between hostile thoughts and physical violence.
2. There will be a link between physical aggression and each one of the emotional elements: A sense of happiness; positive and negative effect in a direction finding reverse link between physical violence and a sense of happiness; a positive link between physical violence and negative effect and a reverse link between physical violence and a positive effect.
3. There will be a negative link between self control skills and physical violence.
4. There will be a negative link between the sense of belonging and physical violence.

2. Method

Sample

There were 397 participants in the study – all Arab adolescents of 7th – 12th grades, chosen from four schools in the area of the northern “Triangle”. The choice was made as per a convenience sample (see table 1)

Table 1: Distribution of the students by demographic variables

	Percent	number	categories	variable
	50	198	Male	Gender
	50	198	Female	
	19	75	Grade 7 th	Grade
	15.70	62	Grade 8 th	
	24.30	96	Grade 9 th	
	15.90	63	Grade 10 th	
	10.60	42	Grade 11 th	
	14.40	57	Grade 12 th	
			Village	Living place
			Town	Birth order
	44.30	172	Number 1	
	55.40	215	Number 2	
			Number 3	
			Number 4	
	34.60	137	Number 5	
	23.50	93	Number 6	
	17.40	69	Number 7	
	11.60	46	Number 8	
Research	7.10	28		tools
Personal	3.80	15		details
	1.50	6		
	0.50	2		

questionnaire: This questionnaire included personal and familial background, e.g., gender, birth date, birth place, year of immigration, residence, marital status, order of birth and functioning at school.

Aggression questionnaire: Developed by Buss & Perry (1992) this questionnaire contains 29 statements, measuring three dimensions of aggression: Aggressive behavior (both physical and verbal), anger, and hostility. The participants had to decide how much each item characterizes them, by a Lickert scale of 1= “object very much” to 5= “agree very much”. Alpha Chronbach coefficients, as calculated for this study were as follows: General violence (r=0.84), physical violence (r=0.67), verbal violence (r=0.50), anger (r=0.67) and hostility (r=0.56).

Self control questionnaire: Originally developed by Rosenbaum (1980) in order to measure individual differences in self control skills, this questionnaire consisted of 32 items, expressing different parameters of self control skills: Postponement of satisfaction, overcoming pain, planning capacity, use of self instructions etc’. The examinees had to assess each item on a scale of 6 grades, ranging between (-3) and (3) points. The Alpha Chronbach coefficient of this study was rather high (r=0.77).

Social belonging questionnaire: Examining the adolescents’ need to belong to different social groups. The first questionnaire consisted of 23 items examining how important it was for people to be accepted by other people. Following factor analysis the number of items was reduced to 13. After yet another item analysis done by Kelly (1999) the questionnaire was reduced to 10 items. The examinees had to assess different phrases on a 5 grade scale (1 = “very little”; 2 – “little”; 3 = “somewhat”; 4 = “pretty much”; 5 = “very much”). Alpha Chronbach coefficient here was (r=0.62).

Satisfaction scale: This questionnaire of general satisfaction with life was developed by Huebner (1991) and adapted for adolescents. It consists of 4 items, examining general satisfaction with life (“I have a good life”; “my life is exactly as it should be”). The scale contains 7 grades (1 = “never suits”; 7 = “suits nearly always”) Alpha Chronbach coefficient here was (r=0.62).

Positive and negative effect - for children

Originally developed for adults by Watson, Clark & Tellegen (1988), the questionnaire was adapted for children and adolescents by Laurent (1999). It consists of 2 scales for self report: 10 items describing positive effect and 10

items describing negative effect. The examinees had to assess the rate in which they had experienced these feelings in the passing fortnight, on a scale of 5 (1 = “very little”; 2 = “little”; 3 – “somewhat”; 4 = “pretty much”; 5 = “very much”). Alpha Chronbach was (r=0.80) for the positive effect and (r=0.79) for the negative.

Study procedure

All the examinees were asked to fill out – anonymously – the questionnaires, after having made it clear that the findings will be used only for research purposes of the study.

3. Findings

In the first step, correlation between all the study variables was calculated (see table 2).

As can be seen in Table 2, there are some significant links of different intensity between the variables. There is clear negative correlation between self control and the variable “aggression” on its various elements, and between self control and negative effect. On the other hand there was a positive correlation between self control and social belonging and positive effect.

In addition, we could notice high and significant correlation between feelings of anger and physical and verbal violence as well as between anger and general violence.

Table no. 2: Correlation between all the study variables

happiness	Need to belong	violence	Hostility	Physical violence	Verbal violence	anger	Self control	Negative affect	Positive affect	
										1
									1	0.32-**
							1	0.30-**	0.45**	
						1	0.22-*	0.31**	0.005	
					1	0.45**	0.13-*	0.24**	0.002-	
				1	0.37**	0.46**	0.34-**	0.33**	0.17-**	
			1	0.37**	0.33**	0.39**	0.13-*	0.42**	0.11-*	
		1	0.72**	0.76**	0.69**	0.77**	0.28-**	0.44**	0.09-	
	1	0.06	0.15**	0.01	0.02-	0.02	0.15**	0.02	0.12*	
1	0.01	0.30-**	0.29-**	0.26-**	0.15-**	0.17-**	0.32**	0.24-**	0.38**	

*p<0.05, **p<0.01

Assumption no. 1 examined the mediating role of anger with regard to hostility and physical violence.

In order to examine whether anger does indeed mediate between hostility and physical violence, two simple regressions were performed. The first one was performed on the physical violence variable. Firstly, gender, age and residence were introduced as controlling variables, and then – hostile thoughts were introduced. Gender and hostile thoughts were found to contribute to the explanation of the difference of physical violence. Gender clearly contributed (B=3.76; SR=.45; BETA= -.33 P<.001).

Thus, physical violence among boys was found to be higher than among girls. Hostile thoughts were found to contribute significantly (B=2.620; SR=.333; BETA=.348 P<.001). In the second regression, feelings of anger were perceived as permanent in order to examine if indeed anger does mediate between hostile thoughts. We found that in that situation the contribution of hostile thoughts was lower than that in the first regression (P<.001; B=1.548; SR=.340; BETA=.207). Hence, the first assumption was partly corroborated. Feelings of anger mediate partially between hostile thoughts and physical violence among Arab adolescents.

The second assumption focused on the link between feelings of happiness and physical violence.

Table 2 indicates, according to the study assumption, that there is a clear positive link between physical violence and negative effect ($r=0.33$; $p<0.01$) on one hand, and a clear negative link between physical violence and positive effect ($r= -0.16$; $p<0.01$), as well as between happiness and physical violence

($r= -0.26$; $p<0.01$) on the other hand.

Table 3: Regression in steps

R square change	P	SE	B	Beta	variable
0.368	0.000	0.29	2.15	0.32	Step1: control variables anger
	0.000	0.45	3.76-	0.33-	gender
	0.12	0.18	0.27-	0.06-	age
	0.15	0.44	0.64-	0.05-	Living place
0.078	0.000	0.34	1.29	0.17	Step2: Main effects Hostility
	0.001	0.36	1.24-	0.16-	Self control
	0.01	0.29	0.69	0.10	Need to Belong
	0.05	0.35	0.68	0.12	Positive Affect
	0.05	0.24	0.48-	0.08-	Happiness
0.012	0.004	0.43	1.26-	0.18-	Step3: interactions Positive affect and gender
0.011	0.000	0.25	0.91	0.16	Step4: interactions Positive affect and need to belong
0.013	0.004	0.37	1.08-	0.13-	Step5: interactions Need to belong and self of control

Table 3 represents a regression in steps to examine physical violence. As can be seen in the table, this assumption was partially corroborated. Contrary to expected, although in the correlation test we found a reverse link between positive feelings and physical violence and a reverse link between happiness and physical violence, in regression there was no significant link between happiness and violence ($B= -0.48$; $SR=0.24$; $BETA= -0.08$; $P>0.05$), as well as with regard to the link between positive effect and physical violence ($B=0.68$; $SR=0.35$; $BETA=0.12$; $P>0.05$).

Assumption no. 3 dealt with the link between self control skills and physical violence. Table 2 points out a reverse link – as expected, so that the more an adolescent has self control skills, the lower will his physical violence be. This link was also found in the regression in which self control skills had a clear contribution to explain the difference of physical violence ($B= -1.24$; $SR=0.36$; $BETA= -0.16$; $P<.001$).

Assumption no. 4 dealt with the link between the sense of belonging to physical violence. Table 2 indicates the absence of link between the need to belong and violence. On the other hand, in regression analysis we can see that the sense of belonging clearly contributes to explain the difference of physical violence ($B=0.69$; $SR=0.29$; $BETA=0.10$; $P<0.05$).

Assumption no. 5 dealt with the moderating role of self control skills and the sense of belonging on physical violence. Interactions were introduced in the regression analysis. Table 3 points out three interactions which were found significant: Gender with positive effect, a sense of belonging and positive effect and sense of belonging and self control. Interaction of gender and positive effect ($B= -1.26$; $SR=0.43$; $BETA= -0.18$; $P<0.01$).

To test the origin of interaction - a graph was drawn. Calculating the significance of lines in the interaction – the line representing boys was not clear ($t=1.93$; $p>0.05$), contrary to the significance of the line representing girls ($t=2.88$; $p<0.05$) with a negative link between positive effect and physical violence (see graph 1).

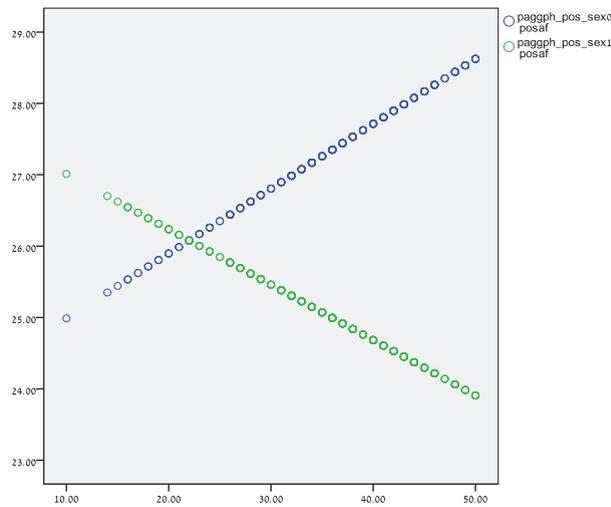


Figure 1: Interaction between gender, belonging and physical violence.

Another significant interaction appeared between the need to belong and positive effect ($B=0.91$; $SR=0.25$; $BETA= 0.16$; $p<0.001$). To test the origin of interaction a graph was drawn. Calculating the significance of lines in the interaction – the line representing adolescents of low need to belong was not significant ($t=0.54$; $p>0.05$) as against the significance of the line representing adolescents of high need to belong ($t=3.65$; $p<0.01$) (see graph 2)

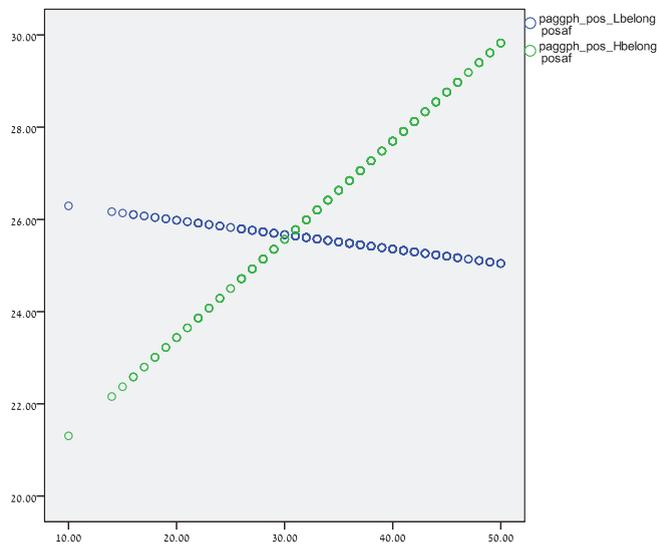


Figure 2: Interaction between positive effect, need of belonging and physical violence.

This finding shows that only in adolescents with high need to belong a positive link was found between positive effect and physical violence.

A third interaction was between the need to belong and self control ($B= -1.08$; $SR=0.37$; $BETA= -0.13$; $p<0.01$). To test the origin of interaction a graph was drawn. Calculating the significance of lines in the interaction – the line

representing low need to belong was not significant ($t=0.35$; $p>0.05$) contrary to the significance of the line representing those with a high need to belong ($t=5.17$; $p<0.01$) (see graph 3).

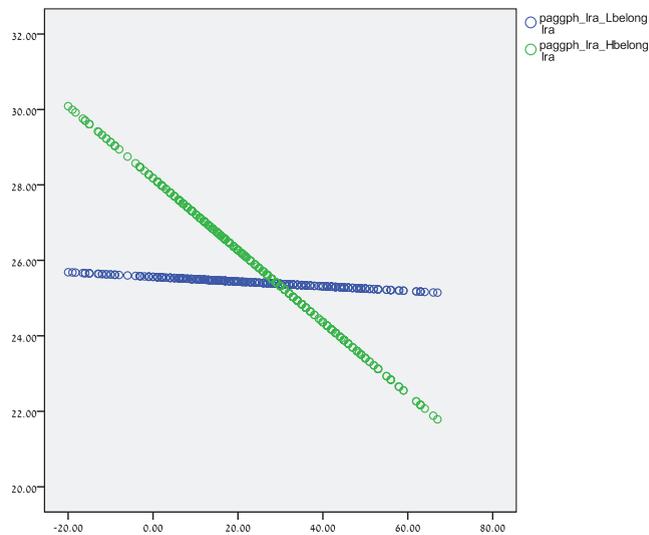


Figure 3: Interaction between self control, the need to belong and physical violence.

This finding indicates that only among adolescents with a high need to belong there is a negative link between self control and physical violence.

4. Discussion

Most of the findings indicated support of the study assumptions, matching previous findings on the subject, for adolescents over the world (Baron, 2003; Ronen 2004, 2005; Ronen et al., 2007).

The findings of the study indicated a significant positive link between hostility and physical violence. Feelings of anger mediated this link only partially. This finding corroborates our first assumption partially, yet raises the importance of both elements - the cognitive and emotional – as significant elements in predicting physical violence. Regarding hostility, the finding matches previous findings, indicating significant link between the existence of hostile thoughts in students and aggressive behavior (Bandura et al., 2001; Crick & Dodge, 1994). This finding corroborates Dodge et al's (2002) model of social info-processing. The assumption, as per this model, is that people with hostile thoughts, interpret situations negatively, tending more to attribute hostile intentions to others and react aggressively accordingly (Crick & Dodge, 1994; Hubbard et al., 2001).

Regarding anger, too, the finding matches previous findings, connecting the capacity to manage anger with a child's violent behavior. Anger is considered a strong predictor of aggressive behavior (Eisenberg & Dedmon, 2000).

The findings of the study partially corroborated the assumption predicting negative link between mental wellbeing (measured by level of happiness and positive and negative emotions) and physical violence. Calculating correlation showed a negative link between positive effect and physical violence, and a negative link between physical violence and happiness, yet the regression did not clearly predict physical violence due to happiness and positive effect. Examination of interactions showed that the negative link between positive effect and physical violence appeared in female adolescents – which may corroborate the assumption partially.

Findings regarding the negative link between mental wellbeing and violence match previous findings indicating reverse link between mental wellbeing and violence among adolescents (Anthoney, 1997).

The findings also support the concept of the contribution of happiness and positive feelings to reducing the tendency to aggression and frustration. These findings match previous findings, emphasizing that positive effects protects children from aggressive interactions (Arsenio & Lover, 1995). According to this concept, happy children with positive emotions and capacity to endure frustration have a better capacity to develop social and interpersonal skills, which will in turn protect them from provocative events.

The third main finding of this study was a negative link between self control and physical violence. This finding is in accord with Ronen et al's (2007) study, reporting a negative link between self control and aggression. It also matches previous studies' findings indicating the alleviating effect of self control on reducing ODD behavior (McGinnis & Goldstein, 1997; Ronen, 2003, 2005).

These findings constitute yet another evidence of the support of the self control model in general, and its cultural matching to other (non western) societies. This study is considered to be a pioneer in the field of self control model research, related to violence among Arab adolescents in Israel. These findings, also support the model of social information processing (Crick & Dodge, 1996; Dodge & Coie, 1987) assuming that children with appropriate interpretation of social and inner clues tend to process this information in a more balanced (less distorted) manner, which raises the probability of choosing more adaptive and controlled behavior. This finding, in addition to its theoretical contribution to the model, entails applicative implementations on the issue of developing prevention programs and dealing with violence in general, and school violence in particular. It can be the basis, through which skills of self control can be developed in adolescents, to improve their social conduct and reduce violent behavior respectively.

Regarding the need to belong, calculation of correlation between the need to belong and physical violence did not indicate any significant link, yet in analyzing the regression we observed a positive link between the need to belong and physical violence. These findings may be explained by the fact that adolescents have a strong need for social belonging and a strong link and dependency on others. When interpreting other people's behavior as rejecting or not sympathetic enough - may react in violence.

Regarding the moderating effect of self control, social belonging and positive effect, studying the interactions can show the existence of a significant negative link between positive effect and physical violence among girls, which may corroborate the assumption of mental wellbeing partially. This finding may corroborate the study assumption concerning the contribution of the positive effect to reducing the level of physical violence among female adolescents.

In addition, the interactions performed indicated another important finding – only among adolescents with high need to belong we found a negative link between self control and physical violence; this finding matches other findings in

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