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STRATEGIES FOR STATUS ATTAINMENT IN PEER EARLY ADOLESCENT CONTEXTS

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Table of contents

1. Introduction	1
1.1. Theoretical and Empirical Background	2
1.1.1. Social status and social competence	3
1.1.2. Resource control strategies	8
1.1.2.1 Resource control strategies profile's status and behavioral characteristics	12
1.1.3. Social behavior and social status	14
1.1.3.1 Overt and relational aggression	14
1.1.3.2 Prosocial behavior	15
1.1.4. Social goals	17
2. Objectives and hypothesis	21
2.1. Objectives	21
2.1.1. Overall objective	21
2.1.1. Specific objectives	21
2.2. Hypothesis	22
3. Method	23
3.3.1. Participants	23
3.3.2. Design	24
4. Attached manuscripts	24
4.1. Manuscript 1: "Resource Control Strategies Inventory: Adaptation in Chilean Preadolescents"	27
4.2. Manuscript 2: "Resource Control Strategies Profiles: A Latent Class Analysis Approach"	53
4.3. Manuscript 3: "Early Adolescent's Social Status Transitions: The Role of Aggressive and Prosocial Behavior"	79
5. General discussion	109
References	117
Annexes	129

List of Figures

Manuscript 1.

- | | |
|---|----|
| 1. Factorial structure of the Resource Control Strategies Inventory | 42 |
| 2. Resource control strategy groups mean's compared by popularity | 45 |

Manuscript 2.

- | | |
|---|----|
| 1. Item response probabilities for the three-class solution of resource control strategies groups | 68 |
|---|----|

Manuscript 3.

- | | |
|---|----|
| 1. Latent social status profiles | 95 |
| 2. Latent transition probabilities with aggression, prosocial behavior and gender as covariates | 96 |

List of Tables

Manuscript 1.

1. Descriptive statistics for the Resource Control Strategies Inventory items	40
2. Correlation matrix for the Resource Control Strategies Inventory items	41
3. Measurement invariance test between girls and boys for the Resource Control Strategies Inventory	43
4. Classification of the resource control strategies groups in total by gender	44

Manuscript 2.

1. Resource Control Strategies Inventory items, frequencies and percentages of response	63
2. Correlations, means and standard deviations from the peer reported variables	66
3. Fit indices for latent class models with 2 to 5 classes	67
4. Mean differences in social status, and social behavior between the different resource control strategies groups	69

Manuscript 3.

1. Correlations and descriptive statistics for the peer nomination variables	93
2. Multinomial logistic regression for the prediction of membership Probabilities for the second wave latent profiles	97

Abstract

In recent years, different perspectives on the study of social competence during adolescence have risen. Strong accumulated evidence has shown that prominent and dominant social status are associated with aggressive behaviors. Yet, there are some perspectives that suggest that a combination of aggressive behaviors with prosocial strategies might be more effective to attain high status positions. However, the methodologies used to research this phenomenon still leave some empirical questions that are important to address. The present thesis aimed to describe the motivational, behavioral and social status implications of the use of resource control strategies for early adolescents. Three studies were designed to address this objective. The first study collected a sample of 180 students from 5th to 8th grade to validate and adapt the instruments used in the following studies. The second study collected a sample of 630 students from 5th to 8th grade to identify resource control strategies profiles and to compare their levels of aggression, prosocial behavior, popularity and social preference. The third study used a secondary sample from a larger longitudinal study of 1163 students from 4th to 6th grade to identify social status profiles and the role of aggression and prosocial behavior in transitions between profiles. Results indicated that 3 profiles of resource control strategies could be identified: Bistrategic, Prosocial and Non-controllers. Similar results could be seen in the social status profiles: High-Status, Prominent Status, Average Status, Low Status. In general, aggressive behaviors were associated with prominent positions as well to low status positions. Prosocial behaviors were not associated with prosocial strategies, however both of them protected individuals for falling into low status profiles. The thesis showed the importance of taking person centered perspective to study the complexity of peer contextual phenomenon.

Keywords: resource control strategies, aggressive behavior, prosocial behavior, popularity, social preference, early adolescence.

1. Introduction

The research on peer aggression among early adolescents has a long tradition in the developmental literature. There is a special interest in this area because of the consequences for all the actors involved. It has been reported that in Latin America around 50% to 70% of the school population have suffered or know about someone that has been victimized with any type of violence from his peers (UNICEF, 2011). This data is alarming, not only because half of student's experience at least some kind of violence in schools, but also because victimized children have increased probabilities of developing internalizing (i.e., anxiety, depression), and externalizing disorders (i.e., acting-out, substance abuse, etc.) (Graham, Bellmore & Jovonen, 2003; Schwartz, Lansford, Dodge, Pettit & Bates, 2015; Zeman, Shipman & Suveg, 2002). It's also important to recall that children that behave in aggressive ways and victimize others are in danger of developing antisocial and risk behaviors later in life (Campbell, Spieker, Vandergrift, Belsky & Burcinal, 2010; Cleverley, Szatamari, Vallacourt, Boyle, Lipmann, 2012).

However, a research line in developmental psychology has proposed that aggression might be displayed because it serves a social function (Cillessen & Mayeux, 2004; Hawley, Little, & Rodkin, 2007). These theories propose that some forms of aggression are actively used as means to attain social objectives, specially dominance and popularity (Ojanen, Grönroos, & Salmivalli, 2005). So, in contrast with previous proposals aggression is not necessarily a result of problems in social cognition processing of an individual as proposed by Crick and Dodge (1994); instead, it might be a response to social goals and peer context characteristics.

In the same line, Hawley (1999) proposed a model where human individuals intentionally engage in behaviors that give them advantage to obtain and control

social and material resources. This model is called Resource Control Theory (RCT) and proposes that there are two types of resource control strategies, coercive and prosocial strategies (Hawley, 2002). Coercive strategies involve intentional behaviors such as intimidation, manipulation, deception, and aggression as a mean for influencing others. In contrast, prosocial strategies involve intentional behaviors such as negotiation, reciprocation, and being kind to others as a means to obtain something from others or attain influence over them (Hawley, 2007). Hawley (2003) classified individuals based on the amount of use of these behaviors, proposing arbitrary cutoff points in thirds of the dimensions of coercive and prosocial strategies. This resulted in five profiles that are different in status and social behaviors displayed. Despite the empirical support this theory has received (eg. Findley & Ojanen, 2013; Reijntjes, Vermande, Olthof, Goossens, Vink, Aleva, & van der Meulen, 2017), there are still some methodological issues with the classification of the profiles that are important to be revised in order to fully validate the RCT.

Furthermore, there are some theoretical gaps in the RCT regarding the actual social goals early adolescents might endorse, especially those that are supposed to be dominance oriented. In this regard, social goals might be moderators between the resource control strategies and aggressive and prosocial behavior. The present study aims to discuss RCT classification methods, and to understand the implications they have over social behavior and status, it also aims to unveil the role of social goals as possible moderators of the association between resource control strategies and social behavior.

1.1. Theoretical and Empirical Background

1.1.1 Social Status and Social Competence

School environments are spaces where adolescents spend much of the day; so, there they interact with their peers learning and practicing many social behaviors useful for their adult life. During this period, they must develop a variety of social skills to form healthy and meaningful relations. Acceptance has been proposed as a basic human need (Deci & Ryan, 2014). In consequence, adolescents have the need to feel accepted by their peers and to form friendships for an adequate social and emotional development. This is because accepted individuals develop a support network, boosting their self-esteem and self-confidence (Bukowski & Raufelder, 2018).

A research line in developmental psychology has shown consistent associations between aggressive behavior and peer rejection (Coie, 1990; Crick & Dodge, 1994; Bukowski, Bredgen & Vitaro, 2007). These authors argue that aggressive adolescents use a aggression in a reactive form responding to a misprocessing of social information. In turn their peers perceive them as hostile individuals and, in consequence they are less prone to form friendships with them. On the other hand, prosocial behavior generates a positive and cooperative climate that results in popularity (Crick & Dodge, 1994). Nevertheless, some ethnographic studies from the sociological literature observed that some popular kids often used aggression as a mean obtain and maintain their socially prominent status, also called popularity (Adler & Adler, 1995; Eder & Kinney, 1995).

Parkhurst and Hopmeyer (1998) acknowledged that there was an important conceptualization difference between popularity in the research from these disciplines. Specifically, sociometric popularity was a measure of how well liked, accepted, and regarded a child is among his or her peers; this construct was at that time most commonly used in the developmental literature. Meanwhile, perceived popularity was a measure of social centrality, prestige, and visibility of a child among his or her social network; this measure was traditionally used in the sociological

literature. So, according to these authors these two constructs were different types of social status, meaning that perceived popularity was more associated with social prominence, whereas sociometric popularity had a stronger association with peer acceptance.

On a revision of this same problem, Cillessen and Marks (2011) identified that the utilization of the word popularity in the label of both constructs has led to misinterpretation and problems for empirical research. So, as in Coie, Dodge and Coppotelli's (1982) study, they proposed that the construct of sociometric popularity should be called social preference, considering it a measure of how well liked and accepted an adolescent is in its peer network. Also, the construct of perceived popularity was renamed as popularity, and it is a factor of prominence and visibility of an adolescent in the peer context.

Social preference as a measure of likeability has been found to be associated to several positive outcomes such as prosocial behavior (Boor-Klip, Segers, Hendrickx, & Cillessen, 2015), academic achievement, high quality friendships (de Bruyn & Cillessen, 2006) and low levels of victimization (Kawabata, Tseng, & Crick, 2014). In other words, social preference leads to many adaptive and desirable outcomes for the adolescent well-being.

Popularity, on the other hand, has a mixture of positive and negative outcomes. In general, popular adolescents are influential, admired and by social consensus are considered 'cool' (Bellmore, Rischall, & Resnik, 2018; Lease, Musgrove, & Axelrod, 2002), however they are also perceived as mean and aggressive individuals (Berger, Batanova, & Cance, 2015; Prinstein & Cillessen, 2003; Merten, 2011). Furthermore, popular adolescents are on a higher risk of developing deviant and risky

behavior during adolescence, and sometimes they can be instigators or maintainers of peer rejection towards other kids (Cillessen, 2011).

Albeit the differences between these two forms of social status it has been found that social preference and popularity are associated in different ways across specific developmental stages (Mayeux, Houser, & Dyches, 2011; Sandstorm & Cillessen, 2006). Cillessen and Mayeux (2004) assessed 905 children in a longitudinal study from 5th to 9th grade and observed the stability and association between these two constructs. Results showed higher stability in popularity than in social preference. They argued that these results might be because popularity is based on a social consensus of prominence and visibility, while social preference is based on affiliative relations between students. Furthermore, the association between popularity and social preference declined overtime, and for girls it became non-significant in 9th grade. Moreover, in other longitudinal study, Cillessen and Borch (2006) observed that the association of popularity and social preference for girls not only declines, but becomes negative around 10th grade until 12th grade, meanwhile for boys this relation only declines. This suggests that the processes for attaining and maintaining popularity and social preferences are different and may depend, in part, on the behavioral pattern and social abilities that the adolescent displays.

Adolescence is also a stage in life where popularity becomes a predominant social goal over other preferences. LaFontana and Cillessen (2010) found that around the age of 12 the prioritization of popularity reaches preponderance over other social goals, meaning that some adolescents would prefer to be considered popular over being liked by their peers. This is often because popular adolescents have preferential access to some social resources, such as being part of high-status peer groups or influence over others (Hawley & Bower, 2018). In consequence, they might use

aggressive behaviors in order to increase their visibility and reputation to achieve their popularity goal (Cillessen, Mayeux, Ha, de Bruyn, LaFontana, 2014).

Cillessen (2011) organized some of the factors that can explain the emergence and maintenance of popularity. He mentioned that for the emergence of popularity adolescents need visibility, motivation, behavioral skills, and psychological factors. Here he highlights the importance of the utilization of aggression (overt and relational) for obtaining this status, but he also mentions that it is necessary to be combined with prosocial behaviors. Thus, after a conflict generated by popular adolescents, affiliative behaviors are needed to work out the conflict and maintain a relatively positive environment. However, the models used for this last hypothesis have not yet fully answered it.

However, social status is not only configured by popularity and social preference. Social status is a multidimensional phenomenon with other dimensions that have important characteristics. 'Coolness' is also a dimension of social status that adolescents aspire to achieve (Milner, 2004). It is often related to popularity, because it is also based on reputation and it is defined by the peer-network consensus (Bellmore, Rischall, & Resnik, 2018). However, 'coolness' is based on idiosyncratic attributes of the social environment (Wang, Kiefer, Smith, Huang, Gilfix, & Brennan, 2019), and the characteristics that define what is 'cool' or not are dynamic and depend on the norms and social values in a specific context in a specific point in time (Adler & Adler, 1998; Belmore, et al., 2019). In this line of thought, 'cool' adolescents can be considered popular, but popular adolescents are not necessarily considered 'cool' (Wang, et al., 2019). However, 'coolness' and popularity share some adjustment outcomes such as minor delinquency behaviors, and premature risky sexual behavior (Allen, Schad, Oudkerk, & Chango, 2014). It is also interesting to note that aggression is also used as a form to attain 'coolness' in some peer contexts (Wang, et al., 2019).

The differences and similarities between popularity and 'coolness' are not yet completely disentangled and further research is needed.

Other dimension of social status that describes important characteristics of the peer contexts is the number of friendship nominations. This form of status was first studied in the sociological literature and it describes the level of connectedness and social cohesion in an environment (Cuadros & Berger, 2016). The attractiveness of an individual for being nominated as a friend can be also overlapped with other dimensions of social status. For example, popular adolescents often attract friendship nominations because other adolescents might be interested in obtaining some status by befriending someone popular, which is known as the "basking in reflected glory" effect (Dijkstra, Cillessen, Lindenberg, & Veenstra, 2010). On the contrary, popular adolescents are more selective and only reciprocate and nominate as friends those that are similar in status (Dijkstra, Berger, & Lindenberg, 2011). Socially preferred adolescents are also nominated as friends but for different reasons, their attractiveness for friendship nomination is probably based on the desire of forming a meaningful friendship with a prosocial individual (Dijkstra, et al., 2010). This is also an indicator that friendship nomination is a form of status that include aspects of prominence and affection, and the associations it has with the other dimensions of status still need to be further studied.

As mentioned before some of the behavioral strategies to attain social status are hypothesized from different perspectives, like the Resource Control Theory (RCT; Hawley, 1999). In this evolutionary theory, Hawley (1999) mentions that humans, like other animals, are constantly competing for the control of social and material resources. In contrast with other species, humans need to display a combination of coercive strategies with prosocial strategies in order to have an "effective resource control" (Hawley, 2003, p. 281). There are some similarities with the socially dominant

individual portrayed by this perspective and the description of popular and ‘cool’ adolescents, because both are described as highly visible and influential. So, it is not surprising to find that dominant individuals under the RCT perspective emerge as the most popular adolescents in their context (Findley & Ojanen, 2013; Hawley, 2003; Hawley, 2007; Pellegrini, Roseth, Van Ryzin, Solberg, 2011).

1.1.2 Resource Control Strategies

From the RCT perspective dominance is understood as a high control of material and social resources, and the behaviors displayed to become dominant are called resource control strategies (Hawley, 1999; 2007). Coercive strategies are intentional behaviors such as intimidation, manipulation, deception, and aggression oriented to influence others. In contrast, prosocial strategies involve intentional behaviors such as negotiation, reciprocation, and being kind to others as a means to obtain something from others or influence over them (Hawley, 2007).

Hawley (2003) noted that both strategies share a common social goal and found that are positively correlated. So, she proposed the social centrality hypothesis, which indicated that those individuals that are able to display coercive and prosocial strategies in a similar rate are dominant individuals in a peer context. In order to address this hypothesis, the RCT proposed a shift towards a person-centered approach to investigate social behaviors, and five profiles of resource control were proposed. This proposal used an arbitrary cutoff criterion on thirds of the distributions on coercive and prosocial strategies. Bistrategic controllers score in the top 66th percentile of both types of control; prosocial controllers score in the top 66th percentile of prosocial control but low or average in coercive control; coercive controllers score in the top 66th percentile of coercive control but low or average in prosocial control; no controllers score in the low 33th percentile in both types of

control; and average controllers represent the rest of the scores. Despite the theoretical base of the classification, there is an empirical problem that to our knowledge has not been addressed yet in the literature. The use of the arbitrary cutoff points forces to find the five resource control strategies groups in all the populations sampled. This leaves the possibility that some groups could be artificially identified.

However, there is some evidence that suggests that the resource control strategies profiles might be identified in a sample. First, coercive and prosocial strategies have been consistently found to be positively correlated. In a study held with preschoolers Hawley (2002) found a strong positive correlation between both resource control strategies ($r = .67$). And, in a study held by Findley and Ojanen (2013) with adolescents, coercive and prosocial control showed a moderate positive correlation ($r = .46$). These authors also found that coercive control is a predictor of physical and relational aggression, meanwhile prosocial control is a predictor of prosocial behaviors. These results suggest that a person that primarily uses the coercive control might be more likely to use any form of aggression, the same might be true for a person that uses prosocial control as its preferred strategy and prosocial behaviors. This is particularly noteworthy because aggression and prosocial behaviors are found to be negatively related (Berger, et al., 2015; Boor-Klip, et al., 2015; Findley & Ojanen, 2013; Rodkin, Ryan, Jamison, & Wilson, 2013) or not related at all (Cillessen, et al., 2014). Suggesting that there might be underlying groups with different behavioral patterns for aggressive and prosocial behavior. However, this is an empirical question that must be addressed.

There are some previous studies that indirectly addressed this question by categorizing adolescents based on their levels of aggression, prosocial behavior, social status, and social dominance (e.g., Berger, et al., 2015; Choi, Johnson, & Johnson, 2011; Farmer, Estell, Bishop, O'Neal, & Cairns, 2003; Lease, et al., 2002; Monahan &

Booth-LaForce, 2015; Rodkin, Farmer, Pearl & Van Acker, 2000; Teisl, Rogosch, Oshri, Cicchetti, 2012). Most of these studies identified groups of dominant, aggressive and popular adolescents. Only in Lease's and collaborators (2002) study a group of adolescents that could be compared to the bistrategic controllers was found. This categorization was made only with indices of social preference, popularity, and social dominance; one of the groups had adolescents that were liked by others, popular, and dominant, also they showed prosocial behaviors at the same time as relationally aggressive behaviors.

A deeper analysis of the differences between these studies showed that some of them did not include prosocial behavior (i.e. Farmer, et al., 2003; Rodkin et al., 2000), did not distinguish between relational and overt aggression (i.e. Berger, et al., 2015; Teisl, et al., 2012), or did not include a status measure (i.e. Monahan & Booth-LaForce, 2015). Moreover, many of these studies used cluster analysis as main technique, although it has been proposed that this analysis is not as effective as other model-based clustering methods (Magidson & Vermund, 2000), because it does not allow contrasting hypotheses. Seemingly, latent class models use a maximum likelihood estimation, enabling to assess the model's fit (Collins & Lanza, 2010). Furthermore, simulation studies have shown that the classification obtained by a K-means clustering technique has less statistical power than latent class analysis (Magidson & Vermund, 2000). Therefore, this may be a limitation for the replicability of some of these studies, with the exception of Berger, et al. (2015) and Teisl, et al. (2012) that used a latent profile analysis approach.

It is also important to note that some of the studies mentioned before use aggression and prosocial behaviors as approximate measures of coercive and prosocial control, which is not precise. One of the principal characteristics of resource control strategies is the intentionality of the behavior (Hawley, 1999), intended to

influence or coerce peers to do as one's will, while social behavior can have different forms and functions.

Aggressive behavior can be reactive or proactive (van den Berg, Burk, & Cillessen, 2019). Proactive aggression is a form of aggression that is goal-oriented and deliberate; there is extensive literature showing its association with social status, especially popularity (Prinstein & Cillessen, 2003; van den Berg, et al., 2019). Adolescents use this behavior in order to attain and maintain popularity (Cillessen, 2011). This form of aggression appears similar to coercive strategies. Nevertheless, coercive strategies involve more behaviors such as emotional manipulation (e.g., pretending to be upset to obtain someone's attention), intimidation (Hawley, 2007), or bully behavior (Olthof, Goossens, Mermade, Aleva, & van der Meulen, 2011).

Furthermore, reactive aggression is a less intentional behavior and is retaliatory (Prinstein & Cillessen, 2003). The association between reactive aggression and popularity is weaker, although it is positively associated to rejection (van den Berg, et al., 2019). This latter form of aggression is distinct to the coercive strategies because it is not oriented to attain dominance over others; in contrast, it is used to repel the attacks from others. Both proactive and reactive aggression might take overt or relational forms. Overt aggression is referred to actions intended to harm others overtly; this includes hits, slaps, or yelling and calling names (Crick & Grotpeter, 1995; Prinstein & Cillessen, 2003). While, relational aggression is understood as an intended action oriented towards harming other people through influencing its social bonds, like spreading rumors or excluding from social groups (Crick & Grotpeter, 1995; Prinstein & Cillessen, 2003). Both forms of aggression are associated with popularity; however, in order to attain visibility, some adolescents use overt aggression, and later start using relational aggression to maintain their social status (Cillessen, 2011). These

forms of aggression seem to be used strategically, similar to what is expected from coercive and bistrategic controllers.

Prosocial behavior is defined as behavior oriented to benefit others, such as cooperation, willingness to help, or to share (Eisenberg, Fabes, & Spinard, 2006). It has also been established in the literature that these behaviors are associated with acceptance from the peer group (Findley & Ojanen, 2013). The main difference with prosocial strategies is that the latter are oriented to influence others and to obtain some social or material benefit from them (Hawley, 2007), for example, promising reciprocation or telling nice things about the peer they want to influence. So, bistrategic controllers or prosocial controllers can use prosocial behaviors, but these two variables might not be necessarily related.

In consequence, despite the accumulated evidence, the presence of the five resource control strategies profiles in peer adolescent contexts is yet a question that must be addressed with model-based techniques and specific measures of resource control strategies. That is one of the main aims of the present thesis, because this has empirical implications to the characteristics that have been ascribed to the profiles.

1.1.2.1. Resource control strategies profiles status and behavioral characteristics.

The social centrality hypothesis proposes the most dominant individuals should be those that are able to display coercive and prosocial strategies to better influence their environment. This directly indicates that bistrategic controllers should be dominant and influential. Findley and Ojanen (2013) found in a Finnish sample of preadolescents, that bistrategic controllers were the most popular among their peers. Similarly, Reijntjes and collaborators (2016) found in a sample of Dutch preadolescents that bistrategic controllers were as popular as coercive controllers.

Finally, Hawley (2003) found in a German sample of adolescents, that bistrategic controllers were as popular as prosocial controllers. As can be seen, the empirical evidence is unclear regarding whether prosocial control or coercive control is more related to popularity or if the use of both strategies is a critical factor for attaining it. Nevertheless, bistrategic controllers have also been identified to be aware of social cues, able to show empathy towards others and effective moral reasoning (Hawley, 2002), this might indicate that these adolescents might have several social abilities other than the resource control strategies that help them attain a high social status.

The counterpart to the social centrality hypothesis is that non controllers are supposed to be individuals that lack the social abilities necessary to use coercive or prosocial strategies to get any access to resources (Hawley, 1999). This would indicate that they are disliked and unpopular adolescents. However, only in Hawley's (2003) study this was found. Findley and Ojanen (2013) and Reijntjes and collaborators (2016) did not find statistically significant differences between non controllers and average controllers in social status. The only difference found was in the use of aggressive behavior displayed by non controllers.

On the other hand, prosocial controllers are said to be highly socially skilled individuals that are adapted to the social environment by being accepted and liked by others, as reported in Findley and Ojanen's (2013) work and in Hawley's research (Hawley, 2010). In contrast, coercive controllers are said to be individuals that use aggression and bully behavior on a regular basis, resulting in social rejection; furthermore they show deficits on empathy and moral reasoning (Chen & Chang, 2012; Findley, & Ojanen, 2013; Hawley, et al., 2002; Hawley, 2003). These two categories fit in the descriptions of socially preferred and rejected adolescents proposed by Crick & Dodge (1994).

1.1.3. Social Behavior and Social Status

1.1.3.1 Overt and relational aggression.

Crick and Grotpeter (1995) made a distinction between relational aggression and overt aggression, because in previous studies it was a common affirmation to say that boys were more aggressive than girls. But these authors noted that while overt aggression was the most common form of aggression among boys, relational aggression was a form commonly used among girls. However, in a meta-analysis Card, Stucky, Sawalani and Little (2008) found that physical and overt aggression were more displayed by males, while the differences between boys and girls in the use of relational aggression were trivial. This indicated that relational aggression is also a behavioral characteristic among boys that aim to access to higher social status.

An important difference between these two forms of aggression is that overt aggression is easily noted by peers, while relational aggression is subtle, so it is not always noticed by others. Cillessen (2011) mentioned that overt aggression can help adolescents to obtain visibility among their peers. Those who are aggressive could be feared by others, so people would be vigilant when they are around. Since visibility is one of the conditions for gaining popularity the use of this form of aggression may be useful for this purpose (Ojanen & Findley-van Nostrad, 2014; van den Berg, et al., 2019). Also, it can help an adolescent to attain a 'cool' status (Wang, et al. 2019). However, if an adolescent constantly shows overtly aggressive behaviors, it can also have detrimental effects over its social status, because adolescents that are around aggressive individuals might feel in danger of being the target of their aggressive behaviors. In consequence, if the behavior is maintained over time it can result in rejection, disliking and isolation (Cillessen, 2011; Ojanen & Findley-van Nostrad, 2014; Prinstein & Cillessen, 2003; van den Berg, et al., 2019).

Moreover, relational aggression is only effective if there are other peers that engage with this behavior. For example, a rumor can only be spread if there are other peers willing to pass it through the classroom. In consequence, if an unpopular adolescent or disliked adolescent tries to use this form of aggression it would not have the same impact as if a high status adolescent displays it (Prinstein & Cillessen, 2003; van den Berg, et al., 2019). Therefore, once popularity is obtained, relational aggression is more effective than overt aggression for the maintenance of this status (Cillessen & Rose, 2005; van den Berg, et al., 2019). Furthermore, popularity becomes a predictor of relational aggression later in time meaning that the two processes evolve together during adolescence (LaFontana & Cillessen, 2002; Rose, Swenson, & Waller, 2004). It has also been argued that relational aggression requires high levels of social skills; therefore, it is expected to be more prevalent among adolescents than children (Prinstein & Cillessen, 2003).

Relational aggression has also been associated with negative peer affection towards the aggressor (Mayeux, 2013) resulting in peer dislike (Boor-Klip, et al., 2015, Cillessen & Mayeux, 2004; Etekal & Ladd, 2015; Espelage, Holt, & Henkel, 2003; Kawabata, et al., 2014). Despite relational aggression being a subtle behavior, the individual that displays it is easily identified by their peers, so regardless of the reputation they attain, peers will not be willing to be associated with someone completely aggressive. In this line, popular adolescents need to buffer the negative effects of aggression in order to maintain their social status. Hence, Aikins and Litwack (2011) proposed that the use of prosocial behaviors would serve that purpose, because prosocial behavior has consistently been shown as to be associated with peer liking and social competence (Coie, 1990).

1.1.3.2. Prosocial behavior.

Prosocial behaviors have important benefits for a positive social environment, promoting cooperative and reciprocal relations, this is why it was considered as a principal factor of the social competence model proposed by Coie (1990). However, since popularity has also been considered as an important feature by most recent research in peer relations, the role of prosocial behaviors has been undermined focusing mostly on the study of aggressive behaviors (Aikins & Litwack, 2011).

Eisenberg, Fabes, and Spinard (2006) defined prosocial behavior as a voluntary conduct intended to benefit others, such as cooperation, helping others, and willingness to share. In the context of social relations, prosocial children and adolescents are often positively evaluated by their peers (Berger, et al., 2015; Findley & Ojanen, 2013; Rodkin, et al., 2013; Wentzel, 2003). In contrast to aggressive adolescents, prosocial adolescents are reliable individuals, because the probabilities of being their targets of aggression is low. In consequence, the display of prosocial behaviors is associated with positive friendship interactions (Monahan & Booth-LaForce, 2015).

Consequently, prosocial behaviors can be considered as an effective way for gaining peer acceptance. The motives that underlie prosocial behavior are still a matter of philosophical discussion (Eisenberg, Fabes, and Spinard, 2006), mainly because altruistic motivations are hard to differentiate from egoistic motives in the performance of prosocial behaviors. So, there might be at least two profiles of individuals that engage in prosocial behaviors. One that might be intrinsically motivated because of their orientation to others and their affiliative need (Ojanen, Grönroos, & Salmivalli, 2005), behaving prosocially with the majority of its peers. And other profile that might strategically show prosocial behaviors with some peers within specific moments, in order to buffer the effects of their aggressive behaviors and

maintain their popular status (Aikins & Litwack, 2011). Popular adolescents might understand that being liked by all their peers is not completely compatible with a socially prominent status (LaFontana & Cillessen, 2010; Aikins & Litwack, 2011); so, their prosocial behaviors would be directed towards peers they consider important for the maintenance of their social status.

Both aggressive behaviors and prosocial behaviors could be triggered by specific social goals (Crick & Dodge, 1994). So, it is important that they are considered as part of the cognitive mechanisms that predispose the emergence of certain behaviors. That is to say, if an adolescent with a specific pattern of resource control strategy has high status as a social goal, they might be willing to show more aggressive behaviors than other adolescents. In consequence, it can be an important moderator of the associations between resource control categories and social behaviors.

1.1.4. Social Goals

Social goals have been conceptualized as the preference that an individual has for a type of social outcome (Jarvinen & Nicholls, 1996), in which directs energy and resources to accomplish it (Elliot, 1999; Kiefer & Ryan, 2008). This preference may be driven positively by outcomes that are preferred to occur (Jarvinen & Nicholls, 1996). Crick and Dodge (1994) mentioned that social goals direct and motivate social behaviors, arguing that maladaptive behaviors are the result of inappropriate goals. They continue to argue that like any cognition stored in long-term memory, trait-like social goals may be activated by situational cues and affect information processing and social behavior.

Some human motivation theorists have argued that social goals are fundamentally reduced into two groups: agentic and communal (Bakan, 1966;

Buhrmester, 1996). Agentic goals are defined as goals intended to achieve power, influence and notoriety. While communal goals are defined as goals oriented to establish positive affiliation and intimacy with other people and a community as a whole (Buhrmester, 1996).

McClelland (1985), in other model, identified three basic motivational systems that drive behavior: affiliation, power, and achievement. The affiliation goal is a general desire to have intimate relations characterized by warmth and disclosure of personal thoughts and feelings. The power goal is a general desire to have impact and influence over others. Finally, the achievement goal is a general desire to master behaviors and a consistent focus on doing things better (Kiefer & Ryan, 2008). These motivations also match with the Self-determination theory (Deci & Ryan, 2014) that proposed that humans have three basic needs: autonomy, relatedness and competence. In this theory the authors propose that humans are intrinsically motivated towards a goal if this fulfills their basic needs.

Derived from these motivations there have been many approaches relating goals to different behaviors in school contexts, most of them associated to academic achievement (Eccles, 2004; Kiefer & Ryan, 2008). Seemingly, several studies have found associations between social goals and social behaviors in schools. From these studies it can be concluded that in general communal goals are endorsed over agentic goals, especially for children (Caravita & Cillessen, 2012; Ojanen, et al., 2005; Rodkin, et al., 2013), but in adolescent samples the agentic goals rise (Caravita & Cillessen, 2012; Sijtsema, Veenstra, Lindenberg & Salmivalli, 2009). This is supported by LaFontana and Cillessen (2010), who argue that the prioritization of popularity over other social goals reaches a peak at 12 years. It has also been widely reported that boys engage with more agentic goals than girls, which in turn engage with more communal goals (Caravita & Cillessen, 2012; Kiefer & Ryan, 2008; Kiefer & Wang,

2016; Ojanen, Findley, & Fuller, 2012; Ojanen & Findley-van Nostrad, 2014; Ojanen, et al., 2005; van Hazebroek, Olthof, & Goossens, 2016). These results in general show that the desire for intimacy and disclosure in relations is more important during childhood, but a desire for status and dominance takes an important place during the transition to adolescence, especially for boys.

Agentic goals have been found to be positively related to aggression and popularity, and negatively related to social preference. Meanwhile communal goals are related to prosocial behavior and social preference (Caravita & Cillessen, 2012; Ojanen & Findley-van Nostrad, 2014; Ojanen, et al., 2005). Furthermore, agentic goals moderate the relation between popularity and aggression, in which popular adolescents who endorse agentic goals, show higher levels of aggression (relational and overt) in a later time (Ojanen & Findley-van Nostrad, 2014).

Kiefer and Ryan (2008) took another approximation to study social goals. Although their study focused on academic achievement, they differentiated three dimensions of social goals from the scale created by Jarvinen and Nicholls (1996), specifically the goals for social dominance, popularity, and intimacy. Social dominance goals are understood as a motivation to have power over peers, characterized by getting others to comply with their wishes and instilling fear (Jarvinen & Nicholls, 1996; Kiefer & Ryan, 2008). Popularity goals can be understood as a focus on establishing status and prestige within the larger peer group at school (Anderman, 1999; Jarvinen & Nicholls, 1996; Kiefer & Ryan, 2008; Ryan, Hicks, & Midgley, 1997). Intimacy goals are referred to the focus on establishing intimate relations with peers characterized by mutual support and disclosure of thoughts and feelings (Anderman, 1999; Jarvinen & Nicholls, 1996; Kiefer & Ryan, 2008; Ryan, Hicks, & Midgley, 1997).

Popularity goals have been found to moderate the relation between overt aggression and 'coolness', in which 'cool' boys with low levels of popularity goals engage more in overtly aggressive behaviors. In contrast, 'cool' boys with high levels of dominance goals were found to engage more in subsequent overt aggression. Finally, 'cool' girls who endorse popularity goals show higher levels of relational aggression (Kiefer & Wang, 2016). In this study, no moderation was found by the intimacy goals on aggressive or disruptive behavior; however, it didn't include prosocial behaviors in the model tested, which could have been moderated by this type of goals.

Cillessen and collaborators (2014) also found that the prioritization of popularity moderated the relation between popularity and aggression for both genders, showing an increase of aggressive behaviors when popularity was prioritized over other social and academic goals. Also, for boys this social goal negatively predicted prosocial behaviors, while for girls this relation was not significant. This might be related to the fact that prosocial behaviors are not seen as 'cool' behaviors to display, so boys might diminish this behavior in order to attain the reputation they aim.

These results in general suggest that social dominance goals and popularity goals, despite being both agentic goals, might have different associations and implications, because they motivate different forms of behaviors. This suggests that social dominance goals have a stronger relation with overt aggression, which in turn can be related to peer disliking and low popularity. On the other hand, popularity goals may be related to a strategic use of aggression (overt and relational) that could lead to the achievement of that status. For this reason, in this research agentic goals are disaggregated into social dominance and popularity goals.

After a revision on the literature on social goals, it was observed that no study has taken them as moderators of the association between resource control strategies and social behavior. In consequence, the present research will also address this gap. This research first addressed the empirical question of the emergence of resource control strategies profiles in a Chilean sample, using a model-based technique and comparing it to Hawley's proposal (1999, 2003). Later, the groups that emerged from that analysis were compared in terms of social behavior and social status aiming to find support for the RCT's social centrality hypothesis. Finally, a moderation effect was tested for the association between resource control strategies and social behavior moderated by social goals.

2. Objectives and Hypothesis

2.1. Objectives

2.1.1. Overall objective

The thesis has as an overall objective to describe the motivational, behavioral and social status implications of the use resource control strategies among early adolescents.

2.1.2. Specific objectives

1. To identify resource control strategies profile among Chilean early adolescents.
2. To identify possible differences in the levels of prosocial behavior, overt aggression and relational aggression between the resource control strategies profiles.

3. To describe social status differences between resource control strategies profiles.

4. To identify the role of aggressive and prosocial behaviors on the attainment of social status.

5. To test the moderation effect of social goals on the association between resource control strategies and aggression and prosocial behavior.

2.2. Hypotheses

1. Five resource control strategies profiles are expected to be identified, distinguishable by their amount of use of certain resource control strategy: (1) bistrategic controllers with high scores on the scales of coercive and prosocial control; (2) coercive controllers with high scores on the coercive control scale but low or average in prosocial control; (3) prosocial controllers with high scores on prosocial control but low or average in coercive control; (4) average controllers with average scores on both scales; and (5) no controllers with low scores on both scales.

2. In terms of aggressive behavior, bistrategic controllers and coercive controllers are expected to be the most relationally aggressive among the profiles. While, non-controllers and coercive controllers are expected to be the most overtly aggressive.

3. In terms of prosocial behavior, bistrategic controllers and prosocial controllers are expected to be the most prosocial among the profiles.

4. In terms of social status, bistrategic controllers are expected to be the most popular among the profiles. Prosocial controllers are expected to be the most socially

preferred profile. Coercive controllers and non-controllers are expected to be the least socially preferred and popular profiles.

5. High status positions are expected to be attained by the display of aggressive and prosocial behaviors. Low status positions are expected to be attained by the display of aggressive behaviors.

6. Social goals are expected to moderate the association between resource control strategies, and aggressive and prosocial behaviors. Bistrategic and prosocial controllers are expected to behave more prosocially when they also have high intimacy goals. Bistrategic and coercive controllers are expected to behave more aggressively when they also have high popularity goals. Bistrategic and coercive controllers are expected to behave more aggressively when they also have high dominance goals.

3. Method

3.1. Participants

Three different samples were included in the present thesis to address its objectives. For an instrument translation, adaptation and validation study, a sample of 180 students from 5th to 8th grade was recruited ($M_{\text{age}} = 12.00$, 52% girls) from two schools of the Metropolitan Region of Santiago de Chile. For the resource control strategies profiles identification study, a sample of 630 students from 5th to 8th grade was recruited ($M_{\text{age}} = 11.75$, 57% girls) from seven schools of the Metropolitan Region of Santiago de Chile. Finally, for a social status transitions study a sample of 1163 students from 4th to 6th from a larger longitudinal study was used (Age range= 10 – 12, 52% boys) from four schools of the Metropolitan Region of Santiago de Chile. The

study was approved by the Ethical Committee of Social Sciences at the Pontificia Universidad Católica de Chile. Informed consent and informed assent were obtained from all parents and students included in the study.

3.2. Design

This research consisted in three different studies with similar procedures but noticeable differences. The first study was an instrument translation, adaptation and validation study for the Resource Control Strategies Inventory (Hawley, 2006) and the Social Goals Questionnaire (Kiefer & Ryan, 2008). The sample was gathered during the spring of 2017. The whole sample participated in a pilot study of the instruments and a subsample was randomly selected for a focus group interview. The second study for the resource control strategies profiles identification had a longitudinal design with two waves of measurement. The first wave was collected during the months of April to June 2018, and the second wave was collected during August to October of 2018, corresponding to the first and second term of an academic year in Chilean schools. Finally, for the third study of social status transitions the sample from a larger longitudinal study focusing on early adolescents' peer relations was gathered. Two data waves were included, Autumn and Spring 2012. Other methodological details are given in the manuscripts.

4. Attached Manuscripts

Three articles have been developed according to the objectives of the thesis.

Manuscript 1: "Resource control strategies inventory: adaptation in Chilean early adolescents".

The first article indirectly addressed the general objective of the thesis. This manuscript, presented below, describes the need for a specific measurement of resource control strategies in Spanish and the need for an adaptation to a Latin-American context. Quantitative and qualitative methods were taken for the translation, back translation, experts' validation, pilot study and focus group interview. Some modifications had to be performed to the original instrument, reducing to 9 the number of items. Results indicated that the resulting instrument had valid results for the aimed population. Details about the methodology and analysis can be found in the manuscript attached below (see section 4.1). This manuscript was submitted to the *“Revista de Psicología de la Pontificia Universidad Católica del Perú”*.

Manuscript 2: “Resource control strategies profiles during early adolescence: a latent class analysis approach”

The second article approaches the first, second and third objectives of the thesis. This manuscript used a latent class analysis to identify the resource control strategies profiles and later used this classification to study the differences in social behavior and social status between them. Results showed that only three profiles could be identified in the present sample, however they had consistent behavioral patterns similar to the groups originally hypothesized. Statistical differences were found in their levels of aggressive and prosocial behavior, as well as in popularity and social preference. Other details about the methodology and analysis can be found in manuscript 2 (see section 4.2).

Manuscript 3: “Early Adolescents’ Social Status Transitions: The role of aggressive and prosocial behaviors”

The third article concerns the fourth objective of the thesis. This manuscript used a latent transition analysis to identify the social status profiles that emerged in a Chilean preadolescent sample, and to determine if the transitions were driven by changes in aggressive and prosocial behavior. Four profiles could be identified distinguishable by prominent and affiliative forms of status. Aggressive and prosocial behaviors increased the transitions to different social status profiles. Details about the methodology and analysis can be reviewed in manuscript 3 (see section 4.3).

4.1 Manuscript 1

Title:

Resource Control Strategies Inventory: Adaptation in Chilean Preadolescents

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4.1.1 Abstract

Resource Control Theory (Hawley, 1999) has been presented as an alternative theory for the study of preadolescent social behavior. However, there are no instruments to assess its proposals for the Spanish language. The study's objective was to adapt and validate the Resource Control Resources Inventory for the Chilean preadolescent population. For this purpose, qualitative and quantitative methodologies were used. 5th to 8th graders from two public schools from Santiago de Chile were part of the sample. Seven students were interviewed, and 180 were surveyed. After the translation and adaptation, the inventory showed an excellent fit to the factorial model, and the criterion validity showed similar results to those reported in recent literature.

Key Words: Resource Control Theory, Prosocial, Coercion, Preadolescents, Status.

4.1.2 Introduction

Aggressive behavior has been generally considered as an outcome of a misprocessing of the information coming from social context (Crick & Dodge, 1994). Nevertheless, more recent perspectives propose that aggression is, in reality, an adaptive response to contextual demands (Hawley, Little, & Rodkin, 2007), and it even can become instrumental to the attainment of social status in peer contexts (Berger & Rodkin, 2012).

A perspective aligned with this vision is the Resource Control Theory (RCT) proposed by Patricia Hawley (1999). This theory has an evolutionary perspective and proposed that human beings have internal dispositions that impulse them to seek social dominance because prominent individuals have preferential access to resources that increase their chances of surviving and reproducing. Hawley (2003) defined social dominance as the maximum control of social and material resources. According to this theory, the concept of resource references a great variety of objects and situations. For example, material resources can be considered food, money, or others, while social resources are friendships, status, and influence. This is an essential difference with the ethological of social dominance because, under the RCT perspective, the individual that can use diverse strategies to control the most resources would be the most dominant. Hawley (2003) proposes that from early developmental stages, some strategies to attain social dominance start to be practiced, they can be identified in its two principal forms: prosocial strategies and coercive strategies.

Prosocial strategies are understood as socially accepted behaviors to obtain resources in interaction with others; these behaviors can be considered as promising reciprocity, cooperation, alliances formation. Prosocial behaviors can also be

considered as a negotiation mechanism with others to obtain something from them. On the other hand, coercive strategies imply behaviors such as intimidation, manipulation, or aggression. Intentionally displayed to obtain resources (Hawley, 2007). In consequence, coercive strategies are behaviors to force others to do as one's will.

Even if both strategies sound to be opposed, it is necessary to consider that both serve the same social function, resource obtention, which relates to an RCT nuclear aspect, the social centrality hypothesis. It proposes that those individuals that are the most socially dominant are those that can display both resource control strategies in diverse contexts and situations (Hawley, 1999). These individuals have been called bistrategic controllers, and compared to others, they most frequently use both strategies. It is important to note that the use of resource control strategies is intentional and is oriented towards the accomplishment of social goals.

Resource control strategies must not be confused with aggressive behavior or prosocial behavior in general. Aggression and prosociality can also have reactive forms (Findley-van Nostrand & Ojanen, 2018, Prinstein & Cillessen, 2003; van den Berg, Cillessen & Burk, 2019), in contrast, resource control strategies are always instrumental or proactive (Hawley, 1999). The consistent results of previous research found a positive association between coercive and prosocial strategies (approx. $r = .40$, Hawley, 2007) and the negative or no relation between aggressive behavior and prosocial behavior (Berger, Batanova, & Cance, 2015; Cillessen, Mayeux, Ha, de Bruyn, & LaFontana, 2014).

Nevertheless, resource control strategies are associated with these forms of social behavior. Specifically, association between coercive strategies and aggressive behavior have been observed (relational aggression: $r = .63$; physical aggression: $r =$

.61, Findley & Ojanen, 2013). Moreover, prosocial strategies are somewhat less but still significantly associated with prosocial behavior ($r = .14$, Findley & Ojanen, 2013), indicating that they are similar constructs, but they keep having some differences.

4.1.2.1 Person-centered perspective

A central aspect that differentiates the RCT from other theories in the peer relations literature is the person-centered perspective. From this point of view, the subgroups of resource control are identified. For that objective, Hawley (2003) proposed the identification of five groups, given their frequency of use of a particular resource control strategy, with arbitrary cutoff points on thirds of the scales of prosocial and coercive control. Bistrategic controllers, above the 66th percentile of both scales; prosocial controllers, above the 66th percentile for the prosocial strategies scale, but below the 66th percentile in the coercive strategies scale; coercive control, above the 66th percentile the coercive strategies scale but below the 66th percentile in prosocial strategies scale, typical controllers with average scores on both scales; and non-controllers, below the 33rd percentile on both scales.

With this perspective, some of the aspects of the social centrality hypothesis could have been supported. For example, it has been reported that bistrategic controllers are the most popular students in their peer groups, while non-controllers are the least popular among their peers (Hawley, 2003). Regarding prosocial controllers, they have been reported to be the most socially accepted students. However, they are not as popular as bistrategic controllers (Hawley, 2003). Furthermore, bistrategic controllers have been reported to use aggression and bullying behavior as instruments to attain dominance (Olthof, Goosens, Vermade, Aleva, & van der Meulen, 2011) while non-controllers are the most socially withdrawn (Findley & Ojanen, 2013).

Concerning gender differences, when the theory was first proposed and given that resource control strategies variate and not only imply physical strength to attain coercion, no gender differences were expected (Hawley, 1999). However, empirical evidence has shown that both the ratio of use of the different strategies and the classification percentage for each group is different between girls and boys. Girls, in general, prefer prosocial strategies over coercive strategies, while boys are reported to use more coercive strategies (Findley & Ojanen, 2013; Hawley, 2003, Reijntjes, Vermande, Olthof, Goossens, Vink, Aleva, & van der Meulen, 2017). Also, boys are overrepresented in the coercive control group. While girls are overrepresented in the prosocial control group, no differences are reported for other groups (Reijntjes, et al. 2017).

4.1.2.2 Resource control strategies measurement

Since the RCT was proposed, there have been multiple measures for resource control strategies. Thru peer nomination (Findley & Ojanen, 2013; Olthof, et al., 2011), teacher report (Hawley, Johnson, Mize, & McNamara, 2007), self-report (Hawley, 2003; Olthof et al., 2011) and observation (Hawley, 2003). Almost all this measurement have taken as a base the items proposed by Hawley (2003), that later were published in a self-report instrument for adults, called the Resource Control Strategies Inventory (RCSI, Hawley, 2006). This instrument is only available in the English language.

According to a literature review, there is only one instrument available for early adolescents and adolescents, proposed by Olthof et al. (2011). This instrument has some meaningful differences with the RCSI in the item phrasing. These authors especially mention that the RCSI uses phrases such as: "I influence others doing

something in exchange for them." This phrasing implies that the strategies used already achieve a goal, and they do not involve the behaviors adolescents display to achieve the goal, whether it is accomplished or not. A counter-argument for this proposal is that goal achievement is what this theory is searching for. The RCT focuses on investigating how adolescents influence their context. Consequently, the achievement of the social goal proposed is indispensable for knowing if the strategy used is beneficial for the person who displays it.

On the other hand, Latin-American societies, in comparison to the US, have been found to be more prosocially oriented towards the people from their in-group (Fiedler, Hellmann, Dorrough, & Glöckner, 2018), meaning that it is probable that in these societies the communal well-being is preferred. Specially, Chileans have a strong belief of citizen solidarity (Román, Ibarra, & Energici, 2014). Furthermore, Chilean people is strongly engaged into civic activities for a greater communal goal due to their historical context (Luengo & Jimenez-Moya, 2017). Probably, the resource control strategies items proposed for European and North American populations might have different preferences. Specifically, it would be expected that those strategies related to the manipulation of friendship for self-benefit would not be socially adequate, showing higher social desirability with their answers. So, the importance of the RCT study in different cultures is highlighted, to identify differences in the factorial structure of the RCSI depending on the values of different societies, attenuating possible cultural bias in research.

In sum, from a psychometric point of view, it is necessary to identify which are the resource control strategies used by Chilean preadolescents and evaluate if they can be identified as prosocial and coercive. Moreover, identify if they are equivalent to boys and girls given the gender differences found in the literature. The present research's main objective is to translate, adapt, and validate the Resource Control

Strategies Inventory (RCSI). To achieve this goal, quantitative and qualitative methodologies were applied with the following steps: translation and back-translation, an adaptation of the items for an early adolescent sample, experts' panel for content validity, psychometric evaluation, and a focus group. In the same line, the validation results from the literature are expected to be replicated, specifically the classification for the resource control strategies groups and popularity level differences within the groups.

4.1.3. Method

4.1.3.1 Participants

Data collection had two moments during the spring of 2017. Initially, 180 students from 5th to 8th grade of two schools from the Metropolitan Region of Santiago, Chile, were surveyed. Furthermore, in a second moment, a focus group was held with seven randomly selected students from 5th to 8th grade of one of the schools previously surveyed. The age mean was 12 years (*Min* = 10, *Max* = 15). The sample was balanced by sex (52% girls). The Socio Economical Status of the schools was determined by the Agencia de la Calidad de la Educación Chilena (SIMCE), which classified one of the schools as medium-low SES and the other school as medium-high.

4.1.3.2 Instruments

Resource Control Strategies Inventory (RCSI, Hawley, 2006). This 12-item inventory of self-report is measured on a Likert scale of 4 points (1 = Never, 2 = Seldom, 3 = Often, 4 = Always). This instrument measures both forms of resource control strategies (prosocial and coercive). This instrument was originally designed for the adult population and English speakers; in consequence, several steps were taken

for its translation and adaptation. The first step was the translation and back-translation of the instrument (Brislin, 1970). Two bilingual psychologists performed individual translations, separately, for later integration of the two versions, discussing the possible differences in the language used. Later, a third bilingual psychologist, who was not present during the initial translation and did not know the original content of the English items, performed the back-translation from Spanish to English. This version was later compared to the original version, and no significant differences were observed, so the adaptation process started with age and context. Items were phrased in a way that students could understand them from 9 to 15 years old, and that it also kept construct validity. Posteriorly, five experts in the area were consulted, and the resulting instrument was sent. Two specific questions for each item were asked: *“the present item measures a coercive/prosocial resource control strategy?”* and *“Can this item be understood by a Chilean student between 9 and 15 years old?”*. Also, experts could give opinions over the item adequacy for the sample and construct. The information collected during this step was used to prepare a third version of the instrument, as shown in Table 1.

Popularity. Students reported how popular they perceived themselves through the following question: *“On a scale from 1 to 10, and in comparison to your peers, how popular are you?”*.

Focus group interview. A focus group interview script was developed, where each one of the items of the RCSI was read aloud after each item students were asked: *“what do you understand from this affirmation?”* and *“do you think that doing this is something common among peers your age?”* These questions were open to all participants, and at least one participation per person was encouraged to appreciate the general and specific impressions of each item. Also, general comments concerning

the general theme were allowed; this helped to determine the comprehension of the construct.

4.1.3.3 Procedure

Initially, principals of the two selected schools were contacted, and both gave their authorization after the project was explained. Later, letters with informed consent were sent to all legal caregivers. They could choose to give authorization to their children's participation in the surveys and the focus group. Only those students authorized by the caregivers were asked to participate in the study. After that, during regular school hours, two researchers surveyed the students whose caregivers gave the authorization to participate. Those who were not authorized were asked to work on other school activities. Before starting the survey, informed assent was asked from all participants, stressing that their participation was voluntary and that they could refuse to participate or stop participating in any time without any consequence. Only those students who signed the informed assent were surveyed. The instrument application took approximately 30 minutes. Both researchers stayed during the whole application to answer any doubt and assure the confidentiality of the responses. In the end, participants were thanked, and they returned to their normal activities.

Later, one of the schools was selected randomly to perform the focus group. Two students from each level were randomly selected, resulting in a sample of 8 participants. The school provided a private space for the interview during regular class time. Three researchers participated in the focus group, one guided the interview following the script, and the other two were collaborators. Informed assent was read, stressing that the participation was voluntary. One student voluntarily decided not to participate and returned to his classroom. The other participants were encouraged to keep confidentiality and respect for their peers' answers. Once the interview was

finished, participants were thanked and went back to their normal activities. The interview was transcribed by a qualified person who signed a confidentiality compromise. The Ethical Review Board of the sponsoring university approved all these procedures.

Data analysis had two moments, one for qualitative data and the other for quantitative data. The interview's transcript was analyzed with previously defined categories based on the literature review. To consider that an item was correctly understood, the answers should fall into those categories. Conclusions derived from this analysis were used to feed and guide the quantitative analysis. For the quantitative analysis phase, initially descriptive and correlational statistics were estimated, which were interpreted with the qualitative data. For illustration, the interview's vignettes are integrated to support the analysis (participant names are fictitious). At this point, three items were decided to be excluded because they were not correctly understood. With this, a factorial structure was proposed and tested with a Confirmatory Factor Analysis using the Weighted Least Squares for Adjusted Means and Variances estimator (WLSMV). Because of the ordinal nature from the 4 Likert scales for each item. The criterion to determine the model's fit was, in absolute terms, a non-significative Chi-Squared ($p < .05$) was expected. In relative terms, TLI and CFI over .95, and RMSEA and SRMR under .08 were expected (Hooper, Coughan, & Mullen, 2008). Later, invariance models by gender were tested. Finally, to explore the criterion validity, students were classified in the five resource control strategies groups proposed by Hawley (2003). The differences in popularity levels were tested with an Analysis of Variance model, with a Bonferroni correction for Post-hoc tests. All analyses were held using R v3.5.1 (R Core Team, 2018), and for the latent variable models, the "lavaan" package was used (Rosseel, 2012).

4.1.4 Results

4.1.4.1 Descriptive analysis

Means and standard deviations for both of the resource control strategies can be observed in Table 1. Stating with the prosocial dimension, item 9 has the lower mean in this dimension ($M=1.23$; $DE = 0.58$), indicating that the majority of the students indicated that they do not form friendships for getting others to convince others to do what they say. The analysis from what the adolescents informed in the focus group shows that this item was not correctly understood because they conceived friendships as real and not instrumental. So, they would not form new friendships to get something they will ask their actual friends for something as a favor.

“[...] I’m friends with Fernando, for real, we are friends, and I tell him [...] to give me something or buy me something, telling him that I’m his friend.”
(Manuel, 11 years).

Furthermore, as can be observed in Table 2, this item is positively correlated with item 5, which refers to a similar strategy ($r = .22$, $p < .01$), where friendship is formed but fictitiously, making it a coercive strategy.

On the contrary, the rest of the items in the prosocial strategies scale shown higher means and standard deviations and are slight to moderately associated between them ($.10 > rs < .53$). This association would indicate a minimum amount of internal consistency between the items used on this scale. The prosocial strategies scale without item 9 reaches an acceptable internal consistency measured through a Cronbach’s Alfa (.70).

Regarding the coercive strategies scale, item 5 obtained the lowest mean from the whole instrument ($M = 1.07$; $DE = 0.25$), which is the least reported strategy. With the focus group answers, this item is hard to understand, and it is negatively evaluated, indicating that it is highly susceptible to social desirability answers:

“You tell them that we are friends, but in reality, they are not. It is like you are cheating yourself and maybe you are doing yourself a damage for not being friends and cheating them and you.” (Manuel, 11 years).

Similarly, item 10 shows a low mean ($M = 1.09$; $DE = 0.37$). The interview showed that this strategy is correctly interpreted because physical strength is a strategy that they could observe in other students. However, this strategy was also identified as a negative behavior that deserves to be punished, indicating that it will also be susceptible to social desirability answers:

“In my former school [...] a kid from sixth grade was obligating someone from the fifth grade to buy him something and he hit him. [...] eeh... later the principal arrived and told him that he shouldn't do that, but he never changed. He always hit others to do as he wanted.” (Francisco, 10 years).

Other two items with low means in this scale were items 3 and 6 ($M = 1.26$, $DE = 0.50$; $M = 1.27$, $DE = 0.47$; respectively). From the results of the focus groups, it could be observed that adolescents were able to understand these questions, but both were negatively evaluated strategies. However, these items were consistently related to other items from the scale without considering items 5 and 10 ($.17 > rs < .35$). The coercive control strategies scale without items 5 and 10 reaches an acceptable Cronbach's Alfa (.60).

Table 1.

Descriptive statistics for the resource control strategies inventory items.

Item.	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
<i>Prosocial Strategies</i>				
1. I tend to achieve that my peers do what I want by telling good things about them	1,83	0,75	1	4
2. I tend to achieve that my peers do what I want by explaining them why it's a good idea.	2,17	0,89	1	4
4. I tend to achieve that my peers do what I want by promising something in exchange, that I know I can fulfill.	1,81	0,76	1	4
7. I tend to achieve that my peers do what I want by doing nice things for them.	2,11	0,88	1	4
9. I tend to achieve that my peers do what I want by befriending them.	1,23	0,58	1	4
12. I tend to achieve that my peers do what I want by being nice.	2,38	0,96	1	4
<i>Coercive Strategies</i>				
3. I tend to lie to my peers to get something out from them.	1,26	0,50	1	3
5. I tend to achieve that my peers do what I want making them believe that I'm their friend when I'm not for real.	1,07	0,25	1	2
6. I tend get what I want pretending to be mad with my peers.	1,27	0,47	1	3
8. I tend to obligate my peers to do the things that I want.	1,21	0,51	1	4
10. I tend to use my physical strength to achieve that my peers give me what I want.	1,09	0,37	1	4
11. I tend to push my peers to get the things that I want.	1,28	0,54	1	4

Table 2.

Correlation matrix for the Resource Control Strategies Inventory items.

	1	2	4	7	9	12	3	5	6	8	10
Item 1											
Item 2	.22**										
Item 4	.21**	.10									
Item 7	.46***	.26***	.45***								
Item 9	.08	.03	.31***	.21**							
Item 12	.26**	.36***	.38***	.53***	.25**						
Item 3	.05	.04	.15*	.11	.04	.02					
Item 5	.10	-.13	.10	.16	.22**	.00	.16*				
Item 6	.09	.04	.18*	.18*	.13	.15*	.17	.21*			
Item 8	.17*	.08	.36***	.32***	.23**	.18*	.22**	.12	.29***		
Item 10	-.06	.10	.24**	.16*	.27***	.08	.22**	.06	.03	.43***	
Item 11	.03	.09	.30***	.22**	.18*	.22**	.22**	.17*	.35***	.45***	.39***

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

4.1.4.2 Confirmatory Factor Analysis Model.

Given the previous results, a structural model with two dimensions was proposed. The dimension of prosocial strategies was measured with items 1, 2, 4, 7, and 12. While the dimension of coercive strategies was measured with items 3, 6, 8, and 11, excluding from the model items 5, 9, and 10. With regard to the model's general fit, it was well fitted in absolute and relative terms ($\chi^2=17.94$, $df = 26$, $p = .88$, $CFI = 1$, $TLI = 1.04$, $RMSEA = 0$, $SRMR = .05$). Analysis results can be observed in Figure 1. It can be observed that in both dimensions, the factorial loadings are significant and positive. A moderate and positive correlation was observed between dimensions of prosocial and coercive strategies ($r = .47$, $p < .001$).

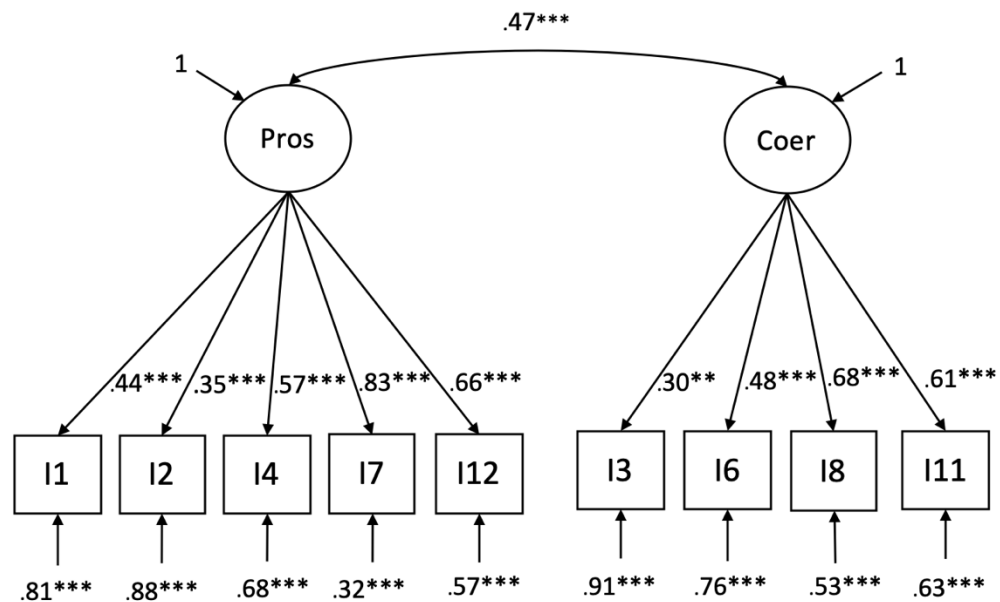


Figure 1. Factorial structure of the Resource Control Strategies Inventory.

Note: Pros = Prosocial Strategies. Coer = Coercive strategies

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

In Table 3, measurement invariance tests for the inventory by gender can be observed. Results show that there are no significant differences in this instrument measurement for boys and girls, achieving a strict level of invariance. This absence in differences can be interpreted as the constructs of prosocial and coercive strategies are the same for both genders, making its scores comparable.

Table 3.

Measurement invariance test between girls and boys for the Resource Control Strategies Inventory

	<i>df</i>	χ^2	Delta χ^2	Delta <i>df</i>	<i>p</i>
Configural	52	36.55			
Weak	59	52.56	8.61	7	0.28
Strong	66	59.55	7.58	7	0.37
Strict	68	63.03	1.13	2	0.56

4.1.4.3. Classification and gender differences in the resource control strategies groups.

Table 4 shows the classification of individuals into each of the resource control strategies groups. The groups with the most representation were the prosocial controllers (25.6%) and the non-controllers (25.6%), and the group with the smallest representation were the average controllers (12.78%). For girls, the larger group were the non-controllers (26.88%), while the smallest was the average controllers (15.05%). For boys, the largest group were the prosocial controllers (28.74%), and the smallest groups were the coercive controllers and average controllers (10.35% in both cases). However, these differences were not statistically significant ($\chi^2=6.27$, $df= 4$, $p = .18$).

Table 4.

Classification of the resource control strategies groups in total and by gender.

	Girls		Boys		Total	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Bistrategic controllers	15	16.13	23	26.44	38	21.11
Prosocial controllers	21	22.58	25	28.74	46	25.56
Coercive controllers	18	19.35	9	10.35	27	15.00
Average controllers	14	15.05	9	10.35	23	12.78
Non-controllers	25	26.88	21	24.14	46	25.56

4.1.4.4. Criterion validity

Figure 2 shows the mean level in popularity for each of the resource control strategies groups. An analysis of variance showed significant differences between at least a pair of groups ($F(4,147) = 3.19; p = 0.015$). The Post-hoc analysis allowed the identification of specific differences between the bistrategic control group and the average control group ($p = .023$). No other differences could be identified ($p > .05$). This difference indicates that bistrategic controllers were more popular than average controllers, but not significantly more popular than the other resource control strategies groups.

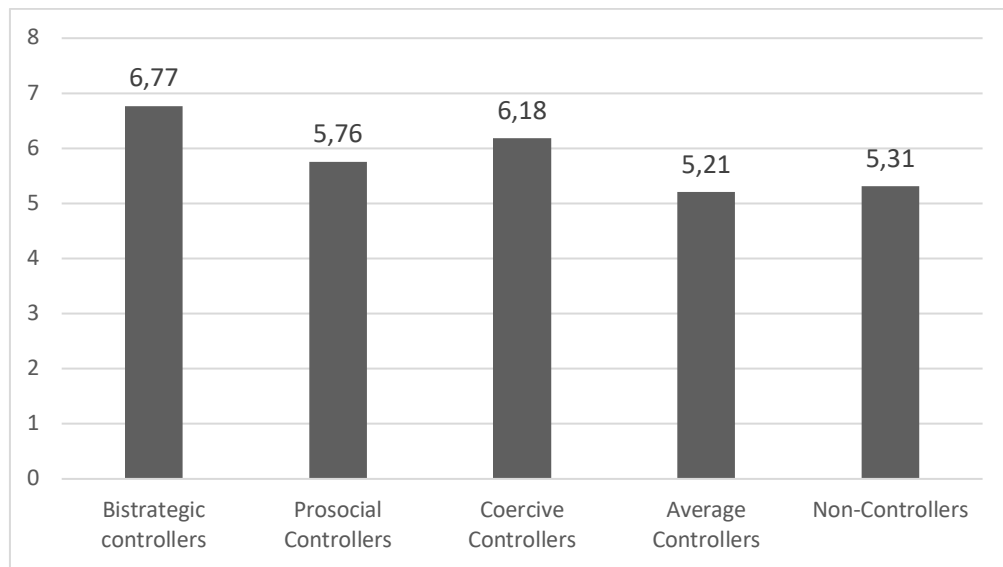


Figure 2. Resource control strategies group means compared by popularity.

4.1.5. Discussion

The present research's main goal was to translate, adapt, and validate the RCSI for the Chilean context. After the proposal of a new factorial structure excluding items 5, 9, and 10 from the model, an acceptable internal consistency could be observed. Also, an optimum model's fit for the confirmatory factor analysis was observed. Then, it can be concluded that the two dimensions of the RCSI are well defined and understood by a population of Chilean preadolescents. The item's 5, 9, and 10 exclusion were grounded on the statistical analyses and in the interview results, which showed a propensity to social desirability and low strategy comprehension.

Given that the Chilean society is oriented towards comunitary goals or social benefits over individual benefits (Luengo & Jimenez-Moya, 2017), it is possible that strategies where fictitious friendships are built, or physical strength is used to get something in exchange could be more negatively viewed than other resource control strategies. In consequence, although it is possible that students, in reality, are using this

type of strategy, they will not be willing to report that they do. This affirmation could be confirmed with observational studies of preadolescent's daily social interactions.

Regarding gender differences for the instrument, the invariance analysis allowed to determine that both dimensions are comprehended similarly by boys and girls; in consequence, their scores are comparable. Nevertheless, it is necessary to note that our results do not match with literature reports. Generally, girls are overrepresented in the prosocial strategies group, and boys are overrepresented in the coercive strategies group (Findley & Ojanen, 2013, Hawley, 2003, Olthof, et al. 2011, Reijntjes, et al. 2017). This difference would indicate that the Chilean sample, in contrast to European and North American samples, does not have a preference defined by gender at the moment of instrumentalizing behaviors to obtain something from their peers. Another relevant aspect of being highlighted is that excluding item 10 implies that the instrument does not account for physical strength as a coercive strategy, which would also explain the differences in gender results from our sample and other samples. Also, it is relevant to note the intentional and instrumental nature of the resource control strategies, because, in previous studies, gender differences have been found in the use of aggressive and prosocial behaviors with Chilean samples (Berger, Batanova, & Cance, 2015).

The group prevalence of the resource control strategies of our study, in general, is very similar to those reported in other studies with preadolescents. However, some specific differences can be identified. Prosocial control and no control groups were the most prevalent in the present study, with 26% of the sample in both cases. In contrast, in previous studies, the group with the highest prevalence was the average controllers (Hawley, 2003, Olthof, et al. 2011, Reijntjes, et al. 2017). Furthermore, the average controllers were the least represented in our study, with 13% of the sample. This difference would indicate that for the Chilean sample, prosocial strategies are preferred over other strategies.

Nevertheless, it is noteworthy that non-controllers have achieved the same level of representation. This representation would indicate that a significant number of Chilean preadolescents do not report using any behavior or strategy to obtain something from their peers. Therefore, this is a relevant factor to be studied in future research, differentiating between social desirability and any cultural factor that would make this group so prevalent.

Finally, concerning the criterion validity, differences in self-reported popularity were expected between the resource control strategies groups. The results partially supported the social centrality hypothesis (Hawley, 1999). Bistrategic controllers were more popular than the average controllers. However, no other differences could be observed. These results could indicate that the combination of prosocial and coercive strategies allows a participant to attain a higher social status; but, the absence of statistical differences in the prosocial, coercive, and non-controllers' groups with the bistrategic control group do not allow to give a definitive conclusion.

4.1.6. Limitations and future directions

The present research has some limitations that are important to indicate. At the moment of comparing the instrument's metric invariance by gender, the sample sizes used are under the Beaujean's (2014) recommendations. **Nevertheless, differences in Chi-squared were not robust enough to consider this a significant risk.** So, the absence of differences in the group classification for girls and boys allows us to conclude that the probability of being classified in any of the groups is the same for boys and girls. It is recommendable that future researches confirm this conclusion.

On the other hand, the measurement used to indicate the participants' popularity levels in the present research was self-report, which is not the golden standard for this type of study. Generally, studies perform sociometric measurements (Cillessen & Marks,

2011). Unfortunately, because of time restrictions, this form of measurement was not possible, in consequence, the error associated with this variable could be high, and this could, in part, account for the absence in statistically significant differences between the resource control strategies groups. Despite this limitation, score tendencies go in the direction of the expected results, indicating that in future research is necessary to use sociometric measurements with status related variables to have more statistical power and identify possible differences between the resource control strategies groups.

In conclusion, and despite the limitations mentioned before, the Resource Control Strategies Inventory is an instrument that measures the behaviors that preadolescent students instrumentalize in obtaining social and material resources. The differences found with other cultures, in contrast to the Chilean culture, highlight the need for more empirical studies in the Resource Control Theory (Hawley, 1999) considering the contextual and cultural dimensions to have a better understanding of the peer relations in Latin-American schools.

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4.2 Manuscript 2

Title:

Resource Control Strategies Profiles: A Latent Class Analysis Approach

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4.2.1 Abstract

Aggressive behavior during adolescence has received much attention from the psychological and sociological literature. The Resource Control Theory (Hawley, 1999) is one of proposals that have risen during the last decades. In spite of constant support this theory has received, the resource control classification has been indicated as arbitrary and there is some mixed evidence for the presence of all the groups in different contexts. This research's main goal is to confirm the structure of the resource control strategies groups proposed by Hawley (2003) with a model-based statistical technique, and also validate the results in social behavior and social status of recent studies. A sample of 630 students ($M_{age} = 11.75$, 57% girls) from seven schools from the Metropolitan Region of Santiago was gathered. Two measurement waves were taken, April to June 2018 for the Wave 1, and August to October 2018 for Wave 2. Three resource control strategies profiles were identified with a Latent Class Analysis: Bistrategic, Prosocial and Non-controllers. Bistrategic controllers were found to be most popular and were as socially preferred as prosocial controllers. Bistrategic controllers and non-controllers were the most aggressive. No differences were found in prosocial behavior. Implications for the RCT are discussed.

Key words: Resource control theory, aggression, prosocial, popularity, social preference.

4.2.2 Introduction

Aggressive behavior between early adolescent peers has received much attention from the psychological and sociological literature in the last decades. Findings have associated this social behavior with many adverse outcomes, not only for those who display aggression but also for the targets (Graham, Bellmore & Jovonen, 2003; Schwartz, Lansford, Dodge, Pettit & Bates, 2015; Zeman, Shipman & Suveg, 2002). This has reinforced the idea that aggression is a maladaptive behavior, resulting from deficient social information processing skills (Crick & Dodge, 1994). However, a different line of research that has addressed aggression from a functional perspective, arguing that aggression could be adaptive for specific contexts (e.g., Cillessen, 2011; Hawley, Little, & Rodkin, 2007), especially for the attainment of social status (Berger & Rodkin, 2012).

Under this view, Hawley (1999; 2007) proposed the Resource Control Theory (RCT), where she suggests that humans have a basic need for searching dominance over others. Dominance in this theory is understood as high control over social and material resources. Individuals display several behaviors in order to attain it. Hawley (1999) called these types of behaviors resource control strategies, distinguishing coercive strategies or prosocial strategies. Coercive strategies involve intentional behaviors such as intimidation, manipulation, deception, and aggression as a mean for influencing others. In contrast, prosocial strategies involve intentional behaviors such as negotiation, reciprocation, and being kind to others as a means to obtain something from others or attain influence over them.

A distinguishing feature of Hawley's theory is a shift in the way the variables are studied. RCT is proposed as a Person-Centered Approach because people are classified depending on their use of resource control strategies, implying that individuals might not only use one type of strategy. Hawley proposed that some people have learned to display both types of strategies depending on the situation they are dealing with, thus obtaining

higher social and material benefits than their peers. These individuals were labeled as bistrategic controllers (Hawley, 2003). Besides this category, other four groups were identified based on the type of strategy they use the most: coercive controllers, prosocial controllers, average controllers, and no controllers.

Different approaches have been used to measure resource control strategies, for example by observation (Hawley, 2002), self-report, peer-report, and teacher report (Findley & Ojanen, 2013; Hawley, 2003; Olthof, Goossens, Mermade, Aleva, & van der Meulen, 2011). Traditionally, resource control groups have been classified using arbitrary cutoff points (33% and 66%) on both dimensions (Hawley, 2003). A revision of the literature found no studies that have used more sophisticated methodologies to identify these groups using the scales of resource control strategies. However, studies have addressed the potential overlap of aggressive and prosocial behaviors. For instance, Berger, Batanova, and Cance (2015) aimed to identify 'Machiavellian' preadolescents using aggression and prosocial behavior and other variables as indicators and Latent Profile Analysis as the classification method. However, they were not able to identify this subgroup probably because they have not used a specific measurement of coercive and prosocial strategies as the primary indicators, as Hawley and Bower (2018) suggest.

This poses an empirical problem because the use of the arbitrary cutoff points forces to find the five resource control strategies groups in all populations sampled. This leaves the possibility that some groups could be artificially identified. Statistical advances in model-based cluster analysis such as Latent Class Analysis (Magidson & Vermund, 2000) address this type of problem, identifying statistically significant subpopulations of individuals, and that could also be replicated and compared in different samples. Regarding RCT is essential to validate the model using a resource control strategy measurement and a model-based technique because of the theoretical implications it has for our understanding of social school contexts and adolescent peer relations.

4.2.2.1 Social status and resource control strategies

Being the objective of the resource control strategies the attainment of social and material resources, social centrality becomes relevant. RCT proposes that individuals that are able to understand and use both forms of resource control strategies depending on the situation they are dealing with are the most dominant in a social context (Hawley, 1999). Popularity has been considered as a dominant position within a social network. Popular adolescents are considered to be influential and highly visible (Cillessen, 2011). In consequence, popularity is a form of status that bistrategic controllers would be able to attain. Findley and Ojanen (2013), found in a Finnish sample of preadolescents, that bistrategic controllers were the most popular resource control group. Seemingly, Reijntjes and collaborators (2016) found in a sample of Dutch preadolescents that bistrategic controllers were as popular as coercive controllers. Finally, Hawley (2003) found in a German sample of adolescents, that bistrategic controllers were as popular as prosocial controllers.

As can be seen, the evidence is unclear regarding whether prosocial control or coercive control is more related to popularity or if the use of both strategies is a critical factor for attaining it. Another aspect of the social centrality hypothesis is that individuals who do not use any resource control strategy are the least dominant (Hawley, 1999). However, only in Hawley's (2003) study, this could be observed. Findley and Ojanen (2013) and Reijntjes and collaborators (2016) did not find that non-controllers were different from average controllers.

Another form of social status that has received much attention during the last decades is social preference, understood as to how well-liked and accepted an individual is among his or her peers (Cillessen & Marks, 2011). This form of status does not exercise the same amount of influence as popularity, but during childhood and early adolescence, both status dimensions are positively associated (Cillessen & Borch, 2006), showing that

during early adolescence acceptance is also important for popular adolescents. From an RCT perspective, in order to maximize the social resources an individual could attain, it might also be necessary to be liked by others.

However, aggression has been consistently associated with rejection (van den Berg, Burk, & Cillessen, 2019), because it is not a socially acceptable behavior. In consequence, the use of aggression must be strategic not only to attain popularity but also for not having detrimental effects on social preference (Cillessen, 2011; van den Berg, et al. 2019). Cillessen (2011) mentioned that popular adolescents in order to maintain their status use prosocial behaviors to lessen the detrimental effects of aggression on likeability.

However, prosocial behaviors generally are not used as instruments for social goals; it is likely that other prosocial strategies could be used to attain this purpose. Findley and Ojanen (2013) found that prosocial controllers were the most liked among their peers, and bistrategic controllers were as liked as coercive controllers and non-controllers. In similar results, Hawley (2003) also found that prosocial controllers and coercive controllers, were the most socially preferred. In contrast, Reijntjes and collaborators (2016) found that non-controllers were the most liked students among their peers. These mixed results show that the association between social preference and resource control strategies is still unclear.

4.2.2.2 Resource control strategies, aggression and prosocial behavior.

As mentioned before, some studies have tried to use the RCT framework to relate social behaviors to different social outcomes, using prosocial behavior and aggressive behavior as indicators of resource control strategies (e.g., Berger, et al. 2015). Nevertheless, aggression and prosocial behavior are not analogous variables to resource control strategies. One of the principal characteristics of resource control strategies is

the intentionality of the behavior (Hawley, 1999), intended to influence or coerce peers to do as one's will while social behavior can have different forms and functions.

Aggressive behavior can be reactive or proactive (van den Berg, et al., 2019). Proactive aggression is a form of aggression that is goal-oriented and deliberate; there is extensive literature showing its association with social status, especially popularity (Prinstein & Cillessen, 2003; van den Berg, et al., 2019). Adolescents use this behavior in order to attain and maintain popularity (Cillessen, 2011). This form of aggression results similar to coercive strategies. Nevertheless, coercive strategies involve more behaviors such as emotional manipulation (e.g., pretending to be upset to obtain someone's attention), intimidation (Hawley, 2007), or bully behavior (Olthof, et al. 2011).

Furthermore, reactive aggression is a less intentional behavior and is retaliatory (Prinstein & Cillessen, 2003). The association between reactive aggression and popularity is weaker, although it is positively associated to rejection (van den Berg, et al., 2019). This latter form of aggression is distinct to the coercive strategies because it is not oriented to attain dominance over others; in contrast, it is used to repel the attacks from others. Both proactive and reactive aggression might take overt or relational forms. Overt aggression is referred to actions intended to harm others overtly; this includes hits, slaps, or yelling and calling names (Crick & Grotpeter, 1995; Prinstein & Cillessen, 2003). While, relational aggression is understood as an intended action oriented towards harming other people through influencing its social bonds, like spreading rumors or excluding from social groups (Crick & Grotpeter, 1995; Prinstein & Cillessen, 2003). Both forms of aggression are associated with popularity; however, in order to attain visibility, some adolescents use overt aggression, and later start using relational aggression to maintain their social status (Cillessen, 2011). These forms of aggression seem to be used strategically. Similar to what is expected from a coercive controller and a bistrategic controller.

Prosocial behavior is defined as behavior oriented to benefit others, such as cooperation, willingness to help others, or to share (Eisenberg, Fabes, & Spinard, 2006). It has also been established in the literature that these behaviors are associated with acceptance from the peer group (Findley & Ojanen, 2013). The main difference with prosocial strategies is that the latter are oriented to influence others and to obtain some social or material benefit from them (Hawley, 2007). One way to observe this difference in the motives of both behaviors is the relation that has been found between them and aggression and coercive strategies. Prosocial behaviors and aggression are negatively associated or not related (Berger, et al., 2015; Card, Stucky, Sawalani, & Little, 2008; Cillessen, Mayeux, Ha, de Bruyn, & LaFontana, 2014) while prosocial strategies and coercive strategies are positively and moderately related (Findley & Ojanen, 2013; Hawley, 2007).

4.2.2.4 Present Study

Previous studies on Resource Control Theory have contributed to the understanding of the functions of aggression and prosocial behavior within school contexts. However, the use of arbitrary classifications has limited the conclusions that can be derived from this line of research. In the present study, we aim to evaluate the structure of resource control groups proposed by Hawley (2003), and also to validate results in social behavior and social status of recent studies. This study also addresses a gap in the literature of the RCT on studies in Latin-American populations, with a prospective study. In order to address this gap, this study features a Chilean sample of early adolescents and followed them across an academic year in order to understand the relations between resource control strategies and social behavior, and social status. In consequence, we propose several hypotheses:

H1: We will be able to identify the five resource control strategies groups (i.e., bistrategic controllers, prosocial controllers, coercive controllers, average controllers, and no controllers) into the preadolescent Chilean sample.

H2: We expect to find that bistrategic controllers have the highest scores in popularity, while no controllers are expected to have the lowest scores in popularity. No specific hypothesis is determined for the other groups.

H3: We expect that prosocial controllers and bistrategic controllers should have the highest levels of social preference.

H4: We expect that bistrategic controllers and coercive controllers are the most aggressive among all the resource control groups, being the non-controllers the second most aggressive.

H5: We expect that prosocial controllers and average controllers are the most prosocial among the other resource control groups.

4.2.3 Method

4.2.3.1 Participants

Data were gathered during the months of April to June 2018 for the Wave 1, and August to October 2018 for Wave 2. A total of 630 students agreed to participate (Mage = 11.75, 57% girls) from seven schools from the Metropolitan Region of Santiago, Chile. One of the participating schools corresponded to high socioeconomic status, two to medium-high, and four to medium-level. Chilean students represented 85% of the total sample, Peruvian students represented 7% of the sample, Venezuelan students represented 3% of the sample, the rest of the students reported to be from other Latin-

American countries. Regarding ethnicity, the ethnic composition of the Chilean society is fairly homogeneous, with near 95% of the population self-identifying as white (or mixed-race with European ascendancy), and only 4.6 % of the national population identifying themselves as belonging to an ethnic indigenous minority, with even a lower proportion in Santiago (Ministerio de Planificación de Chile, 2005).

An invitation letter was sent to principals informing them about the study and asking for their authorization. After the principal's authorization, an invitation letter explaining the project was sent to all parents from fifth to eighth grades, asking for their active parental consent. After this, all students that were authorized to participate were also asked to give an informed assent to participate in the study. They were assured that their answers would be kept confidential, and they could stop participating at any time. The Institutional Review Board of the local university approved all instruments and procedures. All surveys were completed during regular class hours, taking approximately 40 to 50 minutes per classroom. During the survey, participants were asked to answer the questionnaire individually, while trained administrators assisted participants when needed. Those students who were not authorized by their parents or did not want to participate were asked to work on school activities in silence while their peers completed the surveys. Finally, data from 43% of the students were gathered.

4.2.3.2 Measures

Resource control strategies inventory (Hawley, 2007). This is a self-report questionnaire that assesses prosocial and coercive strategies that were assessed during Wave 1. It was adapted and translated to Spanish by Franco and Berger (Manuscript 1). It has five items that assess prosocial strategies and four that assess coercive strategies. Initially, this instrument had four possible responses from never to always, but due to highly skewed responses, data were dichotomized to "Yes" or "No," indicating that the

strategy was used at least sometimes or never. Items are shown in Table 1 as well as the frequencies of responses.

Table 1

Resource Control Strategies Inventory items, frequencies and percentages of response.

Item	No		Yes		Total
	<i>f</i>	%	<i>f</i>	%	<i>N</i>
<i>Prosocial Strategies</i>					
<i>PS1.</i> I tend to influence my peers telling good things about them.	223	36	403	64	626
<i>PS2.</i> I tend to achieve that my peers do what I want by explaining them why it is a good idea.	169	27	458	73	627
<i>PS3.</i> I tend to achieve that my peers do what I want promising something in exchange that I know I can fulfill.	272	43	355	57	627
<i>PS4.</i> I tend to achieve that my peers do what I want by nice things for them.	190	30	436	70	626
<i>PS5.</i> I tend to achieve that my peers do what I want by being nice.	117	19	509	81	626
<i>Coercive Strategies</i>					
<i>CS1.</i> I tend to lie to my peers to get something out from them.	474	76	152	24	626
<i>CS2.</i> I tend to get what I want pretending to be mad with my peers.	453	72	173	28	626
<i>CS3.</i> I tend to obligate my peers to do the things that I want.	494	79	128	21	622
<i>CS4.</i> I tend to push my peers to get the things that I want.	450	72	173	28	623

Peer reports. During wave 2 standard peer nomination procedures were used to assess popularity, social preference, aggression and prosocial behavior (Cillessen & Marks, 2011). Each descriptor was presented with a roster with classmates' names, and participants were asked to nominate all their peers that fit into the description. Individual scores were calculated summing the total number of nominations received for

each item and then dividing it by the total number of potential nominators. This way data is standardized into each classroom.

Popularity. This variable was measured by two items: 'These are the most popular students in my classroom' and 'These students in my classroom are unpopular'. The score from least popular was subtracted from the score of most popular to create a composite score of popularity going from -1 to 1, with higher scores indicating more popularity (Cillessen & Marks, 2011).

Social preference. This construct was measured by two items: 'These are my classmates that I like the most' and 'These are my classmates that I like the least'. The score from least liked was subtracted from the score of most liked to create a composite score of social preference, the score goes from -1 to 1, with higher scores indicating more acceptance and lower scores indicating more rejection (Cillessen & Marks, 2011).

Aggression. Four items were used to measure this variable, two items for relational aggression and two items for overt aggression: In my classroom 'These students start fights', 'These students get in troubles and behave poorly with the teacher', 'These students make fun of others or call by names', and 'these students ignore other students'. The scores from these items were averaged to create a composite score of aggression (Rodkin & Berger, 2008). The Cronbach's alpha was high (.81).

Prosocial behavior. Two items were used to measure this construct: In my classroom 'These students are kind to others', and 'These students cooperate with others'. The scores from these items were averaged to create a composite score of prosocial behavior (Berger, 2011). These two items were highly correlated (.74).

4.2.3.3 Analytic Strategy

Latent Class Analysis (LCA; Lazarsfeld & Henry, 1968) with the Maximum Likelihood with Robust standard errors (MLR) estimator was used to determine the number of resource control strategies groups at Wave 1. This analysis identifies subpopulations on a sample based on the item response pattern (Muthén & Muthén, 1998 - 2012). Each item of the resource control strategy inventory was used as an indicator for the latent classes; as these items were dichotomized results are presented in the probability of answering “Yes” to each item. The estimator used approaches missing data from a Full Information Maximum Likelihood (FIML) perspective, using all available data to maximize the information for data analysis (Gold, Bentler, & Kim, 2003). To determine the number of classes to extract, fit indices as well as theoretical justifications were used (Collins & Lanza, 2010). The fit indices used for this study were the Akaike Information Criteria (AIC), Bayesian Information Criteria (BIC), the Lo, Mendel, and Rubin likelihood ratio test (LMR), and the Vough - Lo, Mendel, and Rubin likelihood ratio test (VLMR). The model with the lowest AIC and BIC, and significant LRM and VLMR p-value compared with a model with fewer classes is considered the best fitting model. Also, the best fitting model should successfully converge, with posterior probabilities close to 1 and entropy close to 1 (Nylund, Asparouhov, & Muthén, 2007). After determining the number of classes from the best fitting model, from four different solutions, we conducted a distal outcome analysis using popularity, social preference, overt and relational aggression, and prosocial behavior in Wave 2 as auxiliary distal outcome variables (Muthén & Muthén, 1998 - 2012). Specifically, we tested whether the three different resource control strategies groups had mean differences in every distal outcomes’ variables. All the analyses were performed using Mplus 7.11 (Muthén & Muthén, 1998 – 2012) and R v3.5.1 (R Core Team, 2018) with the package “MplusAutomation” (Hallquist, & Wiley, 2018).

4.2.4 Results

First, correlations coefficients were calculated between all peer reported variables. As can be seen in Table 2, popularity was positively associated with social preference, overt aggression, and relational aggression; nevertheless, the association with prosocial behavior was not significant. Furthermore, social preference was negatively associated with overt and relational aggression while it was positively associated with prosocial behavior. Overt and relational aggression were highly associated, and both were negatively associated with prosocial behavior.

Table 2

Correlations, means and standard deviations from the peer reported variables

	1	2	3	4	<i>M</i>	<i>SD</i>
1. Popularity	-				-0.06	0.43
2. Social Preference	0.437***	-			0.15	0.32
3. Overt Aggression	0.239***	-0.274***	-		0.14	0.18
4. Relational Aggression	0.294***	-0.225***	0.640***	-	0.13	0.12
5. Prosocial Behavior	0.046	0.487***	-0.356***	-0.289***	0.26	0.17

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

4.2.4.1 Latent Class Analysis

Fit indices for the LCA models are presented in Table 3. Based on the BIC and LMR, a model with three classes was the most adequate. However, the VLMR showed that a solution with four classes was also adequate, showing higher entropy than the three-class solution. The AIC kept decreasing even for a solution with five classes. However, the difference in this indicator between the two and three classes solution was significantly bigger than the differences between the three, four, and five classes solution. Furthermore, the proportions for the latent class patterns based on the estimated posterior probabilities for a four-classes solution showed a group with only

6% of the sample, which was not theoretically interpretable. In consequence, the model with three classes was finally selected.

Table 3

Fit indices for latent class models with 2 – 5 classes.

	AIC	BIC	Entropy	LMR (<i>p</i> value)	VLMR (<i>p</i> value)
Two Classes	6085,67	6170,14	0,76	0,00	0,00
Three Classes	5907,05	6035,97	0,74	0,00	0,00
Four Classes	5887,79	6061,17	0,76	0,05	0,04
Five Classes	5878,36	6096,20	0,71	0,29	0,29

Figure 1 shows evident differences between the item response probabilities for the three latent classes. One of the classes had around 70 and 90% of probabilities of answering positively to all the items of the resource control strategies inventory; this class represented 22.43% of the sample. The pattern it showed is similar to what is expected from bistrategic controllers. Furthermore, a second class had a high probability of answering positively to all the prosocial strategies items, and low probabilities of answering positively to the coercive control strategies items. A total of 56.67% of the sample could be classified into this class, which had a pattern that is expected from prosocial controllers. Finally, the third class had low probabilities of answering positively for both types of resource control strategies, representing 21.90% of the sample. The pattern this class showed is similar to the non-control group. No patterns regarding coercive and average control groups could be observed.

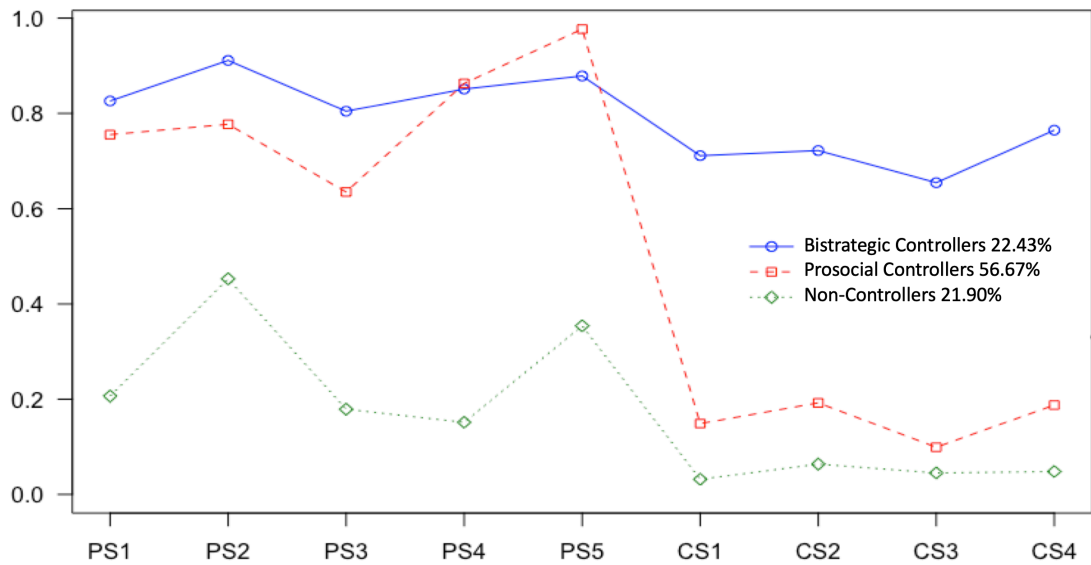


Figure 1. Item response probabilities for the three-class solution of resource control strategies groups

Note. PS = Prosocial strategy item, CS = Coercive strategy item.

Results from the distal outcome analysis with the peer reported data are presented in Table 4. As expected, the bistrategic controllers group had the significantly highest mean in popularity, while prosocial controllers and non-controllers groups did not statistically differ between them. However, in terms of social preference, the prosocial controllers group, and the bistrategic controllers group were not statistically different, but both were higher than the non-controllers group. Regarding social behavior, the bistrategic controllers group was reported to be more overtly aggressive than the prosocial controllers group. However, it was not significantly different from the non-controllers group, and the latter is also not significantly different from the prosocial controllers group. Nevertheless, the bistrategic controllers group and the non-controllers group were reported to be more relationally aggressive than the prosocial controllers group. Finally, no differences could be observed in prosocial behavior between the three resource control strategy groups, meaning that statistically, the three of them display the same amount of collaborative behaviors.

Table 4

Mean differences in social status, and social behavior between the different resource control strategies groups.

Variable	Non-controllers	Prosocial controllers	Bistrategic controllers
Popularity	-0.124 ^a	-0.109 ^a	0.145 ^b
Social preference	0.054 ^a	0.155 ^b	0.196 ^b
Overt aggression	0.144 ^{a, b}	0.111 ^a	0.195 ^b
Relational aggression	0.143 ^a	0.114 ^b	0.162 ^a
Prosocial behavior	0.266	0.275	0.244

Note. Means in a row sharing superscripts are not significantly different from each other.

4.2.5 Discussion

The main aim of the present research was to determine the categorization of a Chilean sample of early adolescents into resource control strategies groups using a model-based statistical technique and to determine the differences these groups have in terms of social status and social behavior. We were able to identify three different resource control strategies groups with behavioral patterns similar to bistrategic controllers, prosocial controllers, and non-controllers. These results differ from Hawley's (1999) original proposal with five different groups; nevertheless, the behavioral patterns validate part of the hypothesis. More precisely, coercive controllers and average controllers could not be identified. Regarding the prevalence of the groups, in previous studies the most prevalent group was the average control group (Hawley, 2003, Olthof, et al. 2011, Reijntjes, et al. 2017); however, in our results, the most prevalent group was the prosocial control group, being over half of the sample. Probably, most of the individuals classified as average controllers by Hawley's categorization would be considered prosocial controllers in the LCA model. The item response probabilities show that the only individuals that report using coercive strategies are the bistrategic controllers, so in this sample, the norm to obtain resources from others is the use of

prosocial strategies. In consequence, for early adolescents in Chile, the most socially acceptable resource control strategies are prosocial. Furthermore, the prevalence of the bistrategic and no control groups are similar to those found in the literature, being around 20% of the samples (Hawley, 2003, Olthof, et al. 2011, Reijntjes, et al. 2017), confirming that even in another form of classification these groups have the same representation in a sample.

The results from this research also confirm the identification of bistrategic controllers; this differs from Berger and collaborators' (2015) findings. However, they used prosocial behavior and aggression as proxies of resource control strategies. This might be the principal reason behind the different results because they also used a model-based classification technique (Latent Profile Analysis) and a Latin-American sample. This research also found that aggressive and prosocial behaviors were negatively associated; however, the resource control strategies share the same intention, and that is why some adolescents might be able to use prosocial and coercive strategies depending on the social situation (Hawley, 2007).

Bistrategic controllers were also found to be the most popular early adolescents. This confirms part of Hawley's (2003) social centrality hypothesis, being popularity a socially dominant position within a peer context (Cillessen, 2011). This indicates that the use of coercive and prosocial strategies benefits this type of adolescent, at least in terms of prominence. However, in contrast to our expectations, non-controllers did not show lower scores in popularity than prosocial controllers. A hypothesis regarding this is that prosocial control is not associated with popularity, because it is intended to influence others with reciprocation or negotiation, which is usually not a characteristic that adolescents indicate as cool (Bellmore, Rischall, & Resnik, 2018). Only coercive control combined with prosocial control becomes a factor for obtaining this form of social status. That might be the reason why prosocial controllers and non-controllers statistically share the same level of popularity.

Regarding social preference, prosocial controllers and bistrategic controllers were found to be the most accepted and liked in the peer network. These results show that even if bistrategic controllers use coercive strategies, they can buffer the rejection this generates with prosocial strategies. However, the level of social preference they receive is not higher than average. During early adolescence, social preference is positively associated with popularity, but this association starts decreasing in later years of adolescence until it is not significant (Cillessen & Borch, 2006). So, it is probable that the level of social preference bistrategic controllers show in this study is part of the developmental stage and is more associated with popularity than to the use of a specific resource control strategy. Future studies should evaluate this competing hypothesis in older samples to further understand the implications of the use of prosocial strategies. On the other hand, the most rejected students were the non-control group. This confirms that the use of resource control strategies is beneficial not only for the attainment of prominence and social dominance, but it is also important for being accepted among the peer network.

For a better understanding of the associations between resource control strategies and social status is necessary to look into the social behaviors they display. Bistrategic controllers showed to be as overtly and relationally aggressive as non-controllers. Aggression has been consistently shown to be associated with popularity (van den Berg, et al., 2019), and negatively associated with social preference (Prinstein & Cillessen, 2003). Here is necessary to notice that the forms of aggression that bistrategic controllers and no controllers might be different, bistrategic by definition use proactive aggression, which is instrumental to their social benefits. While, non-controllers might use a reactive form of aggression; being the least popular and socially preferred students is probable that they are the targets of bullies and might use aggression in a retaliatory manner. This is also consistent with Olthof and collaborators (2011), who found that bistrategic controllers used bully behaviors to gain status over

their peers, while no controllers had the role of victims in this dynamic. This also confirms that coercive strategies, despite being associated with aggressive behaviors, they are not equal. This supports the importance of using specific instruments to measure coercive strategies for the study of the resource control theory.

The resource control groups identified in the present research did not show any difference in the use of prosocial behaviors. Our hypothesis was not supported in this case, probably because of the differences in intentionality between prosocial behavior and prosocial strategies. Prosocial behavior is oriented to benefit others (Eisenberg, et al., 2006), while prosocial strategies are oriented for self-benefits. So, prosocial controllers and bistrategic controllers are not necessarily more cooperative or collaborative than other early adolescents. They might understand how to negotiate and reciprocate to influence others, or in the case of bistrategic controllers, to buffer the adverse effects of their use of coercive strategies. However, it is noteworthy that non-controllers, despite displaying the same amount of prosocial behavior as the other resource control groups, show the lowest levels of social preference. Prosocial behavior is positively associated with social preference (Findley & Ojanen, 2013), so it is expected to observe that students displaying at least some prosocial behaviors would be less rejected by others. Hawley and Bower (2018) mentioned that the use of resource control strategies is associated with social abilities. In consequence, the rejection that non-controllers perceive is probably not only associated with prosocial behaviors but to other social abilities necessary for social interaction. Future research should consider evaluating other aspects of social abilities to understand the causes of rejection for no controller students.

Our results have practical implications for the Resource Control Theory because despite not being able to identify the five groups suggested by Hawley (2003), we were able to find some of the most important and controversial groups. In this line, we encourage the idea that it is necessary to have confirmatory studies for this new model-

based configuration, to discard the possibility that they are a result of a contextual phenomenon. Also, we were able to confirm part of the social centrality hypothesis, showing that bistrategic controllers were the most dominant early adolescents in the sample. This is also important for future interventions because we must not only center our attention on the use of aggression as social behavior. Instead, we must focus on who is displaying it and why they are displaying it. Also, it would be essential to investigate if it is possible to shift the use of coercive strategies into prosocial strategies to influence others.

4.2.6 Limitations

Some limitations of this study should be acknowledged. First, data were gathered for 43% of the sample; this might be considered a problem because the peer reported data could be biased. The low levels of response were due to the fact that students did not take the invitations letters to their parents. Furthermore, we gathered peer reported data for all the students, and we could made an attrition analysis, showing that those students that did not answered were more aggressive and less prosocial, which might be another reason why the coercive controllers group was not identified. However, the correlations observed between the peer reported data did follow a pattern that was consistently seen in the peer relation literature, validating the results from this study. Second, the resource control strategies inventory had to be dichotomized because the distributions for each item were highly skewed towards the lack of use of these behaviors. This indicates that it is probable that this inventory evocates social desirability in the students, and they considered not socially acceptable that they might use some strategies to coerce or manipulate others. This can be an explanation for not finding a coercive control strategy group. It is recommended to replicate these results, also using other forms of measurement such as observations or interviews. Third and finally, this study was not able to obtain information from low socioeconomic status schools. Despite

not having a specific hypothesis in theory regarding this variable, it might be necessary to see whether these results hold in different subpopulations.

4.2.6 References

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4.3 Manuscript 3

Title:

Early Adolescent's Social Status Transitions: The Role of Aggressive and Prosocial Behaviors

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4.3.1 Abstract

Research on early adolescent's peer relations has consistently shown the central role that social status plays in their daily experiences. Adolescents desire to attain high-status positions because they become influential and admired by their peers. However, social status during adolescence is multidimensional and include elements of affective relations and prestige. Furthermore, aggressive and prosocial behavior have been consistently associated with different dimensions of status. This study's aims are to identify social status profiles within a Chilean sample, and to determine the role of aggressive and prosocial behaviors on the classifications between different social status profiles over the course of one academic year. A sample of 1163 students from 4th to 6th grade (Age range = 10-12, 52% boys) from four schools was gathered. They were measured in two waves: fall 2012 and spring 2012. Four social status profiles were identified. In general, over the academic year social status was stable, but transitions to other profiles were modified by aggression and prosocial behavior. Aggression predicted classifications to high-status, prominent and low-status profiles. While, prosocial behavior positively predicted classifications to the high-status profile and negatively predicted transitions to the low-status profile.

Key words: Social status, popularity, social preference, aggressive behavior, prosocial behavior, adolescence.

4.3.2 Introduction

Research on early adolescents' peer relations, and more broadly on the relationships between the individual and his or her social context, has consistently shown the central role that social status plays in their daily experiences and developmental trajectories (Bukowski, Laursen, & Rubin, 2018). Social status refers to the social standing that individuals hold in the peer ecology and therefore is central to the developmental goals during this phase: establishing peer relations but also defining a social position within these relationships (LaFontana & Cillessen, 2010; Ojanen, Grönroos, & Salmivalli, 2005).

During early adolescence, high social status is desirable because it reflects a favorable and dominant position based on a consensual perception of the peer network (LaFontana & Cillessen, 2010). From this position, early adolescents obtain access to social and material resources, such as being part of high-status peer groups, or influence over others (Hawley & Bower, 2018).

Social status is also relevant because of its impact on the psychological well-being of early adolescents. The importance of being accepted by others can be traced to the basic human need of belonging (Deci & Ryan, 2014). Social status can also be understood as a function of social cohesion or connectivity that offers individuals with support, intimacy, and a sense of belonging (Cuadros & Berger, 2016). So, accepted individuals develop a support network, boosting their self-esteem and self-confidence (Bukowski & Raufelder, 2018).

In contrast, individuals that have low status can become isolated and might develop symptoms of anxiety and depression (Lau, Guyer, Tone, Jenness, Parrish, Pine, & Nelson, 2011; Platt, Kadosh, & Lau, 2013). Rejected adolescents also have fewer friends (Berger & Rodkin, 2009; Rubin, Bukowski, & Bowker, 2015; Pouwels, Lansu, &

Cillessen, 2016). Therefore, they have fewer opportunities to practice social abilities necessary to increase their likeability. In consequence, social status is not only vital for influence processes in a school setting but also plays a crucial role by enabling and developing social abilities and networks that are used later in life (Rubin, Bowker, Barstead, & Coplan, 2018).

Previous studies have shown that there is a great variety of social status configurations depending on different status dimensions, and the interplay between these status dimensions and particular social behaviors (e.g., Berger, Batanova, & Cance, 2016; de Bruyn & Cillessen, 2006; Lease, Musgrove, & Axelrod, 2002; Rodkin, Farmer, Pearl, & van Acker, 2000; van den Berg, Burk, Cillessen, 2015). However, transitions between status trajectories have not been addressed in the literature. The present study aims to identify the social status profiles present in a Chilean early adolescent sample and also to understand the role that aggressive and prosocial behaviors play in the transition to different statuses.

4.3.2.1 Dimensions of social status

Social status during early adolescence is multidimensional, including elements of affective relationships and prestige. The first studies on social status came from the developmental psychology tradition and sociological tradition: both started investigating the role of popularity on social relationships (see Mayeux, Houser, & Dyches, 2011). Parkhurst and Hopmeyer (1998) identified differences in the concept of popularity developed by these traditions and renamed the two constructs: sociometric popularity and perceived popularity.

Research has usually distinguished the reputational (perceived popularity) from the affective (sociometric popularity) dimension of social status, and considers them as independent, labeling them as popularity and social preference (see Cillessen & Marks,

2011). Specifically, social preference is a measure of how well-liked, accepted, and regarded an individual is among his or her peers, while popularity is a measure of social centrality, prestige, and visibility of an individual among her or his social network.

Previous studies have identified the overlap and distinction between social preference and popularity. There is an association between these two constructs, but it varies according to age group and gender; specifically, there is an overlap between social preference and popularity during childhood, but this association starts to decline by early adolescence, and it even becomes negative for girls at the end of school years (Cillessen & Borch, 2006). In terms of stability, popular adolescents tend to keep their social position across the school years, because of their visibility and prestige, while socially preferred adolescents tend to vary in their likeability (van den Berg et al., 2015). Finally, the adjustment outcomes associated with these two dimensions of status are also different. Social preference is often related to prosocial outcomes such as academic achievement (Aikins & Litwack, 2011), while popularity is associated with health risk behaviors and delinquent behavior (Schwartz & Hopmeyer Gorman, 2011).

Despite the attention that popularity and social preference have received from the developmental literature, there are other dimensions of social status that have also been studied. 'Coolness' is also one form of status that adolescents aspire to (Milner, 2004). It is similar to popularity because it is based on reputation, and it is defined by peer consensus (Bellmore, Rischall, & Resnik, 2018,). Even though popularity involves social centrality and prominence within the peer group, it does not fully capture the idiosyncratic attributes of cool youth (Wang, Kiefer, Smith, Huang, Gilfix, & Brennan, 2019). The characteristics that define what it is cool or not changes continuously and depends on the norms and values in a peer context and in a specific point in time (Adler & Adler, 1998; Belmore, et al., 2019). Cool youth can be considered popular, but popularity is not sufficient for coolness (Kiefer & Wang, 2016). Nevertheless, coolness and popularity share a significant amount of variance (Wang, et al. 2019) and similar

adjustment outcomes, such as minor delinquency, and premature and risky sexual behavior (Allen, Schad, Oudkerk, & Chango, 2014). Also, they are both related to aggressive behavior in the peer context (Wang, et al. 2019). So, it is important to study both dimensions related to prominence to fully understand the configuration of social status within the peer context.

The number of friendship nominations can also be considered a form of social status. Friendship nominations can show the level of connectedness and social cohesion in an environment (Cuadros & Berger, 2016). There is also an overlap between being nominated as a friend and other forms of status. Popular individuals attract friendship nominations because other adolescents might be interested in obtaining some status by befriending someone popular (Dijkstra, Cillessen, Lindenberg, & Veenstra, 2010). Also, popular adolescents give fewer friendship nominations and select as friends those who are similar in status (Dijkstra, Berger, & Lindenberg, 2011). Also, liked students are targeted as friends (Dijkstra, et al., 2010). However, in contrast to the other forms of social status, friendship nominations include both the aspects of prominence and affection that are worth studying in the configuration of social status that might emerge in a particular context.

4.3.2.2 Social status and social behaviors

Being the attainment and maintenance of social status, a developmental goal during early adolescence (LaFontana & Cillessen, 2010), different social behaviors are displayed by adolescents in order to achieve these goals. For instance, aggression and prosocial behavior have been widely studied in their specific associations with social status indicators (Cillessen, 2011; Hawley, Little & Rodkin, 2007; Prinstein & Cillessen, 2003; van den Berg, et al., 2019), arguing that these behaviors might play a functional role for these means.

Previous studies have shown that aggressive behavior is effective for obtaining popularity (van den Berg, et al. 2019) and coolness (Wang, et al. 2019) for some adolescents. Nevertheless, it is not instrumental for all adolescents. Aggression is not socially acceptable behavior, so its reiterative use can have detrimental effects on social status, especially on social preference (Prinstein & Cillessen, 2003; van den Berg, et al. 2015; van den Berg, et al. 2019). Furthermore, if the individual that is displaying this behavior does not hold a high – status position, this detrimental effect might be stronger (Wang, et al. 2019). So, the use of aggression has to be strategic in order to be convenient for the social goal that is intended to (Hawley & Bower, 2018).

On the other hand, prosocial behavior has been directly related to likeability (Berger, Batanova & Cance, 2015; La Fontana & Cillessen, 2002), and positive friendship interactions (Monahan & Booth – LaForce, 2015). Also, prosocial behavior has been positively related to popularity and coolness (Berger, et al. 2015; Boor-Klip, Segers, Hendrickx, & Cillessen, 2015); nevertheless, the magnitude of this relation is lower than with social preference. Furthermore, prosocial adolescents are attractive for friendship selection, especially for those who suffer victimization (Berger, Gremmen, Palacios & Franco, 2019).

Prosocial behavior might also be displayed in an instrumental manner to lessen the effects of aggressive behavior on their social status (Cillessen, 2011; Hawley, et al. 2007). These adolescents have been called ‘Machiavellians’ (Hawley, 2003), because they use a combination of prosocial and aggressive behaviors strategically to gain status, especially popularity, within the peer context (Reinjtjes, Vermande, Olthof, Goossens, Vink, Aleva, & van der Muelen, 2017). In fact, variable-centered approaches have clearly identified the associations between specific dimensions of status and social behavior. But there is still more research needed to understand if the instrumental combination of aggressive and prosocial behaviors is equally effective for all adolescents, given a

previous social status. A person-centered approach seems to be adequate to address these questions.

4.3.2.3 Social status profiles

Previous studies have also taken a person-centered approach to determine the heterogeneity of social status subtypes or profiles in the school context. One of the first studies that intended to identify the differences in high-status individuals was held by Rodkin, Farmer, Pearl, and van Acker (2000). They categorized early adolescent boys (fourth to sixth-grade students) into six different subgroups based on the level of popularity, athletic ability, prosocial behavior, and academic ability. The groups they identified were: model students (who were popular, athletic, prosocial and academically competent), tough boys (who were perceived as popular and athletic but also aggressive), bright antisocial (who were academically competent but aggressive and unpopular), trouble boys (seen as aggressive, unpopular and academically incompetent), and passive and low academic boys (who were distinguished by their levels of shyness and popularity, and by their academic competence).

Seemingly, Lease, Musgrove, and Axelrod (2002) identified seven subtypes of social status for boys and girls from fourth to sixth grade, based on their social preference, popularity, and social dominance. The profiles were labeled as: high-status, perceived popular/dominant, well-liked/dominant, average, low dominant/unpopular, disliked, and low status. These profiles were later compared in their levels of coercive behaviors, prosocial characteristics, self-esteem, and self-concept. The first three profiles were high on dominance and were differentiated by the levels of popularity and social preference. The last three, where all disliked and unpopular, only the disliked group had higher levels of dominance in contrast with the others. High-status individuals were seen as leaders, admirable, cool, and influential. In terms of social behaviors, the high-status profile for boys and girls was distinguished by prosocial behaviors,

athleticism, and aggressive behaviors. The well-liked/dominant group only showed prosocial behaviors and athleticism. In contrast, the perceived popular/dominant group was considered physically attractive but aggressive.

In other study determining profiles of status and social behavior during early adolescence, Berger, Batanova and Cance (2015), identified three latent profiles: High aggressive – high popular status, high prosocial – low aggressive, normative – low aggressive. The indicators they used for the identification of these profiles were aggressive and prosocial behaviors, popularity, likeability, coolness, Machiavellianism, empathic concern, and perspective-taking. This study was the first attempt to identify a subgroup that displays aggressive and prosocial behaviors at a similar rate. Their results showed that when considering social behavior as part of the profile, no group displayed both prosocial and aggressive characteristics concurrently.

Van den Berg et al. (2016) argued that the use of behavioral characteristics along with social status variables in previous research on social status profiles might not be the best approach because behaviors may cause and be a result of social status. So, they performed a cohort study with third to eighth graders using only popularity and social preference as status indicators for the identification of profiles. For the cohorts from third to seventh grade, three groups were identified: popular – liked, average, unpopular – disliked. While for the eighth-grade cohort, four groups were identified: popular, liked, average, unpopular-disliked. Gender differences were found; boys were overrepresented in the disliked group for all cohorts; also, in the younger cohorts, boys were overrepresented in the popular -liked group, but for older cohorts, girls were more numerous than boys. With regard to behavioral patterns, for the younger cohorts, the popular group was considered prosocial, cooperative, and good friends. While for the older cohorts, popular adolescents were considered aggressive, while liked adolescents were considered prosocial. Finally, in terms of stability, the most stable group across cohorts was the disliked group, and the least probable transition was from the high-

status group to the low-status group, as well as vice versa. This study brings important insights into the configurations of social status, their stability across years, and their behavioral patterns.

4.3.2.4 Present study

In general, earlier studies have made particular findings regarding social status profiles. As observed by van den Berg et al. (2015), many of them include behavioral characteristics in the identification of profiles. Nevertheless, it would also be necessary to include other dimensions of status in order to understand these configurations fully. The present study's objectives are, first, to expand this knowledge identifying social status profiles with different dimensions in a Chilean sample and second, to determine the role that aggressive and prosocial behaviors play in the stability and transition between different social status profiles over the course of one academic year. Accordingly, we have several hypotheses: (1) We expect to identify four different social status profiles: A High-Status profile with high scores on popularity, coolness, likeability and friendship nominations; a Prominent Status profile with high scores on popularity, coolness and friendship nominations, but low scores on likeability; a Low-Status profile with low scores on popularity, coolness, likeability, and friendship nominations; and an Average Status profile with mean scores on all the indicators. (2) We expect that the most stable social status profile will be the Low – Status profile. (3) Aggression will increase the likelihood of being classified in the Prominent Status profile and to the Low – Status profile. (4) Prosocial behavior will increase the likelihood of being classified in the High-Status profile.

4.3.3 Method

4.3.3.1 Participants

The present study is part of a larger longitudinal study focusing on early adolescents' peer relations. Participants were 1163 fourth, fifth and sixth graders (age range = 10-12; 52% males) from four Chilean schools in the Metropolitan Region of Santiago, followed over three years (2012-2014). For this study only two data waves were used (Fall and Spring 2012). Socioeconomic status was measured at the school level: according to the national socioeconomic classification criteria used by the Chilean national system of educational evaluation (SIMCE), two schools were middle socioeconomic status (SES), one was upper-middle, and one was lower-middle SES. Parental consent allowing student participations was obtained for 79.6 % of students. Data was gathered for 73.9 % of students.

4.3.3.2 Instruments

Standard peer nominations procedures were used to assess all variables at both assessments (Cillessen & Marks, 2011). For each item a descriptor was presented along with a list of all classmates' names. Participants were asked to nominate all classmates that they considered fit each descriptor. Individual scores were calculated by the total number of nominations received for each item divided by the number of potential nominators to correct for classroom size.

Popularity. This construct was measured by two items: *'These are the most popular students in my classroom'* and *'These students in my classroom are unpopular'*. We kept these items separately contrary to earlier studies that subtracted unpopular from popular nominations (see Cillessen & Marks, 2011) because we were interested on each dimension for the profile identification.

Coolness. This dimension was measured by one item: *'These are the coolest students in my classroom'*.

Social Preference. This construct was measured by two items: *'These are my classmates that I like the most'* and *'These are my classmates that I like the least'*. As with the popularity construct, these items were considered separately differentiating between acceptance and rejection.

Friendship. We measured friendship by a single item: *'These classmates are my best friends'*.

Aggressive behavior. Four items considering both relational and overt aggression were used to measure this construct: In my classroom *'These students start fights'*, *'These students get in troubles and behave poorly with the teacher'*, *'These students make fun of others or call by names'*, and *'these students ignore other students'*. A general composite was created with a high Cronbach's alpha (.90). These items were measured only at the second wave.

Prosocial behavior. Two items were used to measure this construct: In my classroom *'These students are kind to others'*, and *'These students cooperate with others'*. A general composite was created with a high correlation (.83). These items were measured only at the second wave.

4.3.3.3 Procedure

Surveys were completed during regular class hours, taking approximately 45 min per classroom. All instruments and procedures were approved by the Institutional Review Board of the local university and by the Chilean National Commission for Scientific Research and Technology (Comisión Nacional de Investigación Científica y Tecnológica de Chile, CONICYT), in order to meet research ethical standards. Participants were assured that their answers would be kept confidential and that they could stop participating at any time. During the survey, participants answered the questionnaire

individually, while trained administrators provided mobile monitoring and assisted participants as needed.

4.3.3.4 Analytical Strategy

Three-Step Latent Transition Analysis (LTA; Asparouhov & Muthén, 2014) was used to determine the number of adolescents' social status profiles at each wave, and then to determine the likelihood of transitioning to a different profile on a later time. Latent profiles at both waves were identified using most popular, least popular, cool, most liked, least liked and friendship as indicators. All the analyses were performed using Mplus 7.11 (Muthén & Muthén, 1998 – 2012), and R v3.5.1 (R Core Team, 2018) with the package "MplusAutomation" (Hallquist & Wiley, 2018). The models were estimated using the Maximum Likelihood with Robust Standard Errors (MLR). The Akaike Information Criteria (AIC), the Bayesian Information Criteria (BIC), the sample adjusted Bayesian Information Criteria (aBIC), as well as theoretical criteria, were used to determine that the solution of four profiles was the best fit to the data. Once the number of profiles was determined at each wave, measurement invariance was tested using the log-likelihood difference between the models with Satorra-Bentler statistic. Both models were equivalent in terms of the number of profiles and means for each indicator. For the LTA, aggression, prosocial behavior, and gender were used as covariates for membership likelihood at the second wave. Also, transitions from the high-status profile to the low-status profile and vice versa were constrained to zero, because these transitions were unlikely over the six months period between assessments.

4.3.4 Results

Prior to the LTA, correlation coefficients were calculated for all study variables. Results are shown in Table 1. All the social status variables were stable across both waves ($0.62 < r_s < 0.77$). As expected, aggression and prosocial behavior were negatively related

($r = -0.41$). Furthermore, aggression was positively associated in both waves with popularity (w1: $r = 0.40$, w2: $r = 0.38$), coolness (w1: $r = 0.39$, w2: $r = 0.38$), and least liked (w1: $r = 0.52$, w2: $r = 0.42$), and negatively related to the indicators of not popular (w1: $r = -0.19$, w2: $r = -0.23$), most liked (w1: $r = -0.18$, w2: $r = -0.14$) and friendship (w1: $r = -0.10$, w2: $r = -0.09$). Prosocial behavior was positively associated in both waves to popularity (w1: $r = 0.28$, w2: $r = 0.18$), coolness (w1: $r = 0.21$, w2: $r = 0.16$), most liked (w1: $r = 0.21$, w2: $r = 0.16$), and friendship (w1: $r = 0.54$, w2: $r = 0.39$); and negatively related to not popular (w1: $r = -0.18$, w2: $r = -0.11$), and least liked (w1: $r = -0.44$, w2: $r = -0.34$).

Table 1

Correlations and descriptive statistics for the peer nomination variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Popular w1	0.27	0.21	-												
2. Popular w2	0.27	0.21	0.74	-											
3. No popular w1	0.34	0.20	-0.74	-0.63	-										
4. No popular w2	0.35	0.21	-0.67	-0.70	0.77	-									
5. Cool w1	0.21	0.17	0.76	0.64	-0.64	-0.59	-								
6. Cool w2	0.20	0.17	0.66	0.82	-0.59	-0.60	0.65	-							
7. Most Liked w1	0.31	0.15	0.53	0.42	-0.52	-0.48	0.51	0.42	-						
8. Most Liked w2	0.28	0.14	0.37	0.51	-0.43	-0.44	0.36	0.51	0.61	-					
9. Least Liked w1	0.23	0.16	-0.17	-0.14	0.39	0.33	-0.19	-0.14	-0.64	-0.52	-				
10. Least Liked w2	0.24	0.16	-0.17	-0.17	0.36	0.41	-0.17	-0.15	-0.54	-0.62	0.69	-			
11. Friendship w1	0.26	0.13	0.52	0.44	-0.49	-0.42	0.52	0.45	0.81	0.62	-0.56	-0.47	-		
12. Friendship w2	0.24	0.12	0.37	0.51	-0.40	-0.38	0.35	0.55	0.57	0.82	-0.47	-0.52	0.62	-	
13. Aggression	0.17	0.16	0.40	0.38	-0.19	-0.23	0.39	0.38	-0.18	-0.14	0.52	0.42	-0.10	-0.09	-
14. Prosocial	0.18	0.13	0.28	0.18	-0.18	-0.11	0.21	0.16	0.55	0.39	-0.44	-0.34	0.54	0.39	-0.41

Note: w1 = Wave 1, w2 = Wave 2. All values were statistically significant ($p < .05$).

4.3.4.1 Social status profile

Figure 1 shows the four latent profiles extracted for the first wave and kept invariant to the second wave. The High-Status profile showed the highest mean for popularity, coolness, most liked and friendship indicators, while showing the lowest means for not popular and least liked. In the first wave this profile represented 22.2% of the sample, while in the second wave it decreased to 17.3%. The Prominent Status profile showed similar means to the High-Status profile for popularity, coolness and not popular, but with important differences in liked most, friends, and least liked indicators. This indicates that these participants are only considered popular but not liked and not desired as friends. In the first wave this profile represented 17.0% of the sample while in the second wave this percentage increased to 19.7%. A Low-Status profile was also identified showing the lowest means for popularity, coolness, most liked and friendship, while showing the highest means for not popular and least liked; these participants are rejected by most of their peers, considering them as unpopular and not desired as friends. This profile represented 28.5% of the sample in the first wave; nevertheless, it increased to 34.4% in the second wave, becoming the most prevalent profile. Finally, the Average Status profile showed means around .40 in all indicators. This profile was the most represented in the first wave with 32.2% of the sample, but it decreased to 28.6% in the second wave, below the Low-Status profile.

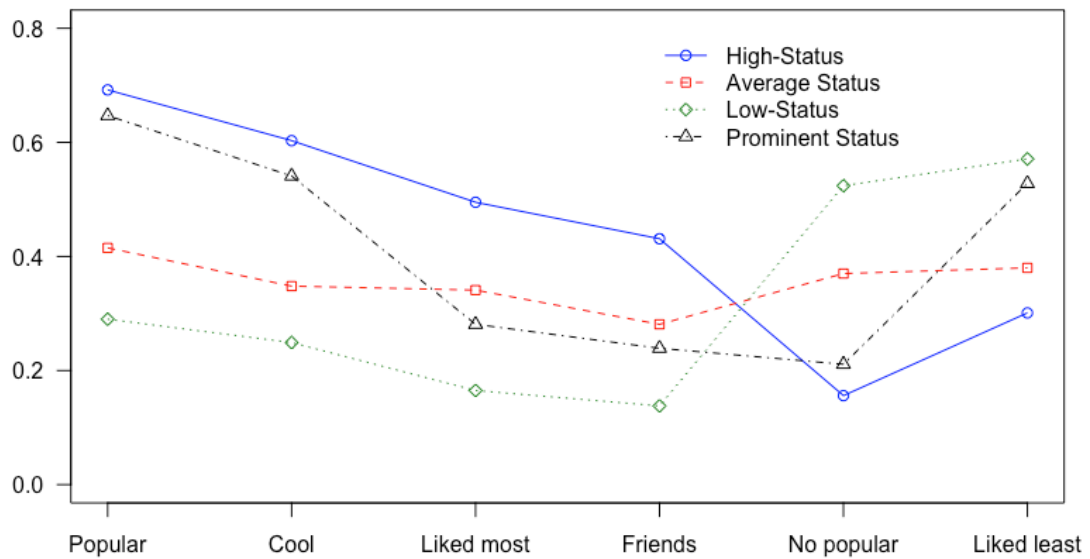


Figure 1. Latent social status profiles.

Figure 2 shows the latent transition probabilities using aggression, prosocial behavior and gender as covariates. Staying in the same profile was the most probable situation for all participants, especially for the Low-Status profile that had a 78% chance of stability; the other profiles had around 50% chance of stability. The least likely profile to transition to was the High-Status profile with 10% and 7% chance for transitioning from the Prominent Status and Average Status profiles, respectively. Meanwhile, the most likely profile to transition to was the Average Status profile, with 23%, 25% and 28% chance of transitioning from the High-Status profile, Prominent Status profile and Low-Status profile respectively. With regard to transitions to the Prominent Status profile, the most likely transition to this profile was from the High-Status profile with 27% chance, and the least likely transition was from the Low-Status profile with 5% chance. Finally, with regard to transitions to the Low-Status profile, the most likely transition was from the average Status-Profile with 25% chance, with participants in the Prominent Status profile having 18% chance for this transition.

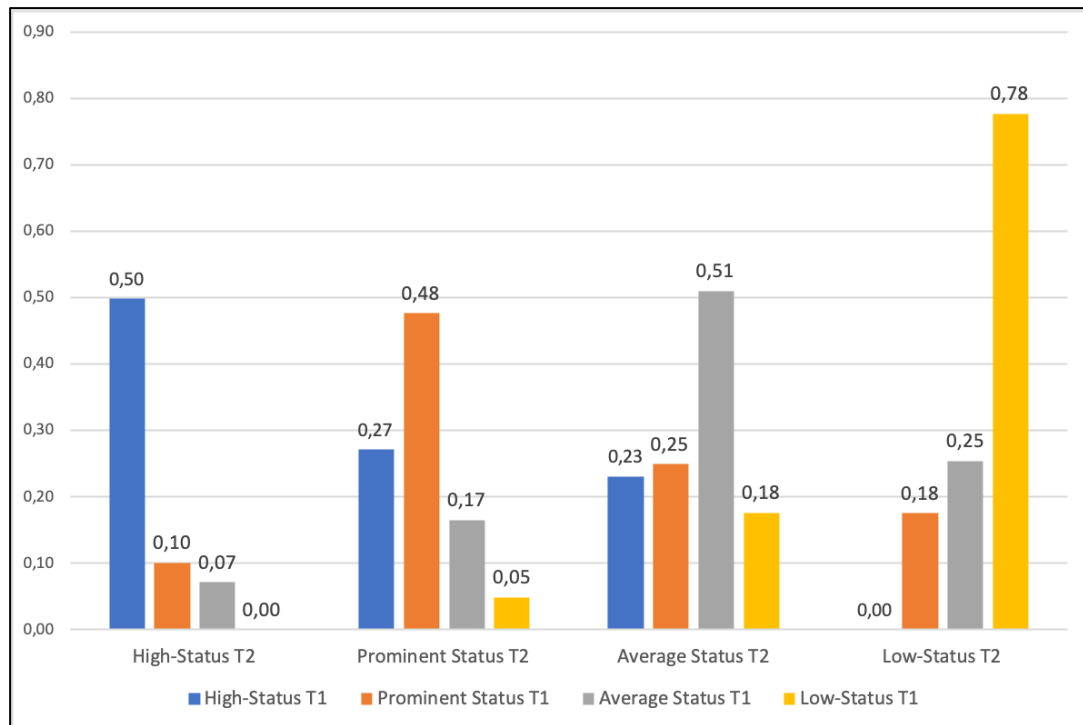


Figure 2. Latent transition probabilities with aggression, prosocial behavior and gender as covariates.

Note: Transition probabilities from High-Status profile to Low-Status profile and vice versa were constrained to zero.

Table 2 shows the prediction of membership classification for the second wave latent profiles with aggression, prosocial behavior and gender as predictors. The Average Status profile was used as the reference group in the multinomial logistic regression. Results show that the probabilities of being classified in the High-Status profile in the second wave versus the Average Status profile increased when participants displayed aggressive ($B = 10.30, p < 0.001$) and prosocial behavior ($B = 9.51, p < 0.001$); this probability was also lower for females ($B = 1.70, p < 0.001$). On the other hand, the probabilities of being classified in the Prominent Status profile in the second wave versus the Average Status profile only increased when participants displayed aggressive behaviors ($B = 13.36, p < 0.001$); this probability was not affected by gender ($B = 0.66, p = 0.076$) or prosocial behavior ($B = 0.19, p = 0.906$). Finally, the

probabilities of being classified in the Low-Status profile versus the Average Status profile in the second wave were increased when participants displayed aggressive behaviors ($B = 2.64, p = 0.018$), and decreased when participants displayed prosocial behaviors ($B = -7.19, p < 0.001$); this probability was also higher for females ($B = 1.16, p < 0.001$).

Table 2.

Multinomial logistic regression for the membership probabilities for the second wave latent profiles.

	HS vs. Avr		Prom vs. Avr		LS vs Avr	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
Aggression	10.30***	1.40	13.36***	1.37	2.64*	1.11
Prosocial Behavior	9.51***	1.40	0.19	1.59	-7.19***	1.13
Gender (0 = male)	-1.70***	0.44	0.66	0.38	1.16***	0.30

Note: HS = High-Status, Avr = Average Status, Prom = Prominent Status, LS = Low-Status.

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

4.3.5 Discussion

The present study aimed to identify social status profiles in a Chilean sample of early adolescents, and also determine the role that aggressive and prosocial behaviors and gender play in the classification in to different social status profiles over an academic year. Hypothesis 1 was partially supported; results showed that four profiles emerged and remained stable in their defining characteristics and configuration over an academic year. As expected, and in line with previous research, groups differed in their levels of prominence and affection. Van den Berg, et al. (2015) found similar groups differentiated by popularity and social preference but in different age cohorts. These authors argued that their results are due to a developmental process by which popularity and social preference start differentiating from each other during early adolescence. This is also consistent with Cillessen and

Borch's (2006) study, where they identified that popularity and social preference were positively correlated during the early stages of adolescence, but this relation decreased until the end of school years.

Our findings support this idea by showing that the differentiation between popularity and social preference might be an ongoing process during early adolescence, evidenced the distinction between two profiles of high social status, one prominent and liked (high status), while the other prominent but disliked (prominent status). The present study shows that these dimensions of status are already distinct in early adolescence and also include being nominated as best friends. The difference in friendship nominations of these two groups also suggests that only high – status individuals are desired as friends, probably because they are also seen as likable, while prominent individuals despite having a prestigious position do not attract the same amount of friendship nominations. Previous studies have proposed that prominent individuals attract friends because their peers want to bask into their reflected glory (Dijkstra, et al. 2010), but these results indicate that prominence might not be the only factor behind friendship attraction; an affective component such as likeability might also be needed.

With regard to the stability of the social status profiles, hypothesis 2 was supported; the low – status profile was the most stable. This shows that rejected and unpopular adolescents have stronger struggles to leave their low social standing. The probability for a low – status individual to transition to a prominent status or a high – status position is very low, and they only have an eighteen percent chance to transition to an average status. It is likely that because of being the least attractive peers to befriend, they also lack social opportunities to develop and practice social abilities that are necessary to establish positive peer relations and therefore be considered, valued, and accepted by their peers (Rubin, Bukowski, & Bowker, 2015). Furthermore, being considered the least 'cool' in a classroom might put them out of

sight for their classmates, lessening their chances of obtaining any type of prominence. Nevertheless, this hypothesis should be tested in future studies.

On the other hand, the stability for the other profiles was very homogeneous, being around a fifty percent chance of staying in the same profile over time. However, the high - status profile is the least accessible profile with chances of around ten percent for prominent and average status profile to transition to this profile. Also, this is the least prevalent status in the second wave. All these characteristics support the idea that a high-status position is exclusive, with preferential and privileged access to resources, making it a desirable position (Hawley, 2003; Ojanen et al., 2005). This exclusiveness is possible because not all adolescents have the behavioral and social abilities to attain and maintain this position. It is also interesting to note that there is higher accessibility to the prominent status profile, showing that the attainment of popularity, regardless of social preference and friendship nominations, is easier for early adolescents. Moreover, there is a fair probability that high-status individuals transition to a prominent status, which could be explained by the lesser stability of social preference that depends more on prosocial behaviors (Cillessen & Borch, 2006; van den Berg, et al., 2015).

With respect to hypotheses 3 and 4, both prosocial and aggressive behaviors affected the classification probabilities between social status profiles. Specifically, the probabilities for being classified in the high - status profile increased with higher levels of both aggressive and prosocial behaviors. These results are in line with earlier research suggesting that prominent individuals use a combination of prosocial and coercive strategies to attain higher social standings in a hierarchy (Hawley & Bower, 2018), being this profile similar to what Hawley (2003) labeled 'Machiavellians.' Nevertheless, it is important to note that according to these theories, popular adolescents are the ones who must use the combination of these two behaviors in order to attain this dimension of social status (Cillessen, 2011). As shown in the

present study, the prominent profile, which is basically characterized by high levels in popularity, did not show this behavioral pattern. It is probable that during early adolescence, holding high levels of several social status dimensions demands social abilities to display 'Machiavellian' type behaviors in order to attain the highest status within the peer network.

Furthermore, the probabilities of being classified in the low – status profile were increased when early adolescents displayed higher levels of aggressive behaviors and lower levels of prosocial behavior. These results are in line with previous research that found that aggressive behavior could also result in peer rejection, especially for low – status individuals (van den Berg, et al., 2019; Wang, et al. 2019). Other studies have also shown that prosocial behavior has a positive effect on likeability (Berger, et al., 2015; La Fontana & Cillessen, 2002), an effect that these adolescents could not benefit from. The difference between the effects of aggression on social status used by high – status and prominent status adolescents, and low-status adolescents might be in the form of aggression they display. High – status and prominent individuals might use aggression as a means for attaining their social objectives, while low – status individuals might use reactive aggression as a mean to defend themselves from their peers. As reported by van den Berg, et al. (2019), adolescents that obtain popularity increase in their use of proactive aggression, while adolescents that loosen their popular status increase in their use of reactive aggression. Nevertheless, in the present research, no distinction by the form of aggression was made, so this question should be answered in further research.

Finally, regarding gender differences, we found different classification probabilities for males and females. Girls had lower chances of being classified into a high - status profile and higher chances to be classified into a low-status profile. Van den berg, et al. (2019) also found that boys were overrepresented in a transition group called 'obtain popularity,' and girls were overrepresented in the 'obtain

unpopularity' group. In the present study, we included more status dimensions, and yet the pattern held similar, showing that even if girls are generally higher in popularity and social preference than boys (Cillessen, 2011), they have higher risks of losing their high-status positions. It is probable that given the social expectations that the female gender role has, the social punishment of displaying aggressive behaviors to attain popularity is higher for girls than for boys. Thus, the expectation for girls showing less aggressive behaviors may end in a greater loss of status when it is not combined with prosocial behaviors.

In conclusion, the present research advances in the understanding of how adolescents' peer ecologies are organized by social status and the role that aggressive and prosocial behaviors play on it. To our knowledge this is the first study that shows that highly popular and liked early adolescents display a combination of aggressive and prosocial behaviors to maintain their status, differentiating themselves from a highly popular—but not necessarily liked—group of adolescents that display only aggressive behavior and average levels of prosocial behavior. It also shows that adolescents who are aggressive and low on prosociality are also rejected and unpopular among their peers. This gives further insights on the importance of the social acceptance that aggression has for high – status individuals, and how they counteract the negative impact of aggression on their peer relationships by also displaying prosocial behaviors.

4.3.6 Limitations and future directions

There are some limitations to the present study that are worth mentioning. First, as mentioned before, the distinction between reactive and proactive aggression could not be accomplished by this study, showing that both high-status individuals and low-status individuals show high levels of aggression. Future research should aim to understand the role of different forms of aggression for the attainment or loss of

status. Second, all the measurements in the present study, where peer nominations. This form of measurement has shown to be reliable in school contexts because it captures the social nature and idiosyncratic characteristics of status. However, the use of multimethod assessments, especially for social behaviors, is also recommended, since social behavior reported by peers does not allow assessing the intentions that underlie the display of these behaviors. In consequence, aggression or prosocial behaviors could be overreported or underreported depending on the subjective perception peers have of a particular student, and not really on the intentions they have on the utilization of certain behavior. Finally, our research was restricted to one academic year, so our results could not be generalized to transitions to different school years. In consequence, longer longitudinal designs and multiple cohorts are recommended because it is plausible that in a longer period of time, transitions from high – status profiles to low – status profiles could be found.

4.3.7 References

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5. General Discussion

The present doctoral thesis studied the motivational, behavioral and social status implications of the use of resource control strategies on early adolescents. Regarding the first specific objective of the thesis, differences were found on the number of profiles identified with an LCA model and those reported using the cutoff criteria proposed by Hawley (2003). Initially we hypothesized the emergence of five profiles that corresponded with the Hawley's (2003) proposal. However, it is important to acknowledge that the three profiles identified follow the same behavioral pattern as bistrategic controllers, prosocial controllers and non-controllers, supporting part of the original proposal. Comparing the resulting group prevalence in our studies and those found in the existing literature, in both cases the pilot study and the profile identification study the most prevalent group was the prosocial controller. This differs with other research where the most prevalent group was the average control (Hawley, 2003; Olthof, et al, 2011; Reijntjes, et al, 2017).

There are some factors that could explain these differences in prevalence and categorization. Latin-American societies, in comparison to the US, have been found to be more prosocially oriented towards the people from their in-group (Fiedler, Hellmann, Dorrough, & Glöckner, 2018), meaning that it is probable that in these societies the communal well-being is preferred. Specially, Chileans have a strong belief of citizen solidarity (Román, Ibarra, & Energici, 2014). Furthermore, Chilean people is strongly engaged into civic activities for a greater communal goal due to their historical context (Luengo & Jimenez-Moya, 2017). These results taken together might indicate that Chilean students observe coercive strategies as socially unacceptable behaviors so they might not be willing to reveal that they display this type of behavior in a self-report even if it is anonymous. This could hide the presence of coercive controllers and inflate the prevalence of prosocial controllers. Or in contrast, Chilean preadolescents might display more prosocial strategies than

coercive strategies, because even if prosocial control strategies are used for personal purposes, they promote reciprocation and a positive environment. The present research cannot give a specific answer to which of both situations lead to our results. However, this emphasize the need for more research in this topic with contextual perspectives, and empirical classifications of the resource control strategies for different contexts.

The second objective aimed to find differences in social behaviors between the resource control strategies profiles. Regarding relational and overt aggression, bistrategic controllers and non-controllers had similar levels on the two forms of aggressive behavior, being the prosocial controllers the least aggressive. These results partially support our original hypothesis. However, these findings have important implications. First, this supports the idea that aggressive behavior cannot be considered the same phenomenon as coercive strategies. The intentionality behind coercive strategies is an important factor in this difference, and in the present research we did not measured proactive and reactive aggression. Bistrategic controllers by definition use proactive aggression, which is instrumental to their social benefits (van den Berg, et al., 2019). By contrast, the aggression that non-controllers display might be reactive in a retaliatory manner from other peers' attacks (van den Berg, et al. 2019). This is also consistent with Olthof and collaborators (2011), who found that bistrategic controllers used bully behaviors to gain status over their peers, while non-controllers had the role of victims in this dynamic. However, this hypothesis should be tested in future studies.

Nevertheless, this also has a relation with an observation made in the social status profiles study. The probabilities of being classified into a low-status profile are increased when the adolescent also shows aggressive behaviors. This also indicates that aggression is ambivalent in terms of social punishment. The display of aggressive behaviors for high-status and bistrategic individuals might be considered a "norm"

because they have dominant positions (Cillessen, 2011). Therefore, they can display overt and relational aggression not necessarily losing their positions because of these behaviors. On the other hand, when a low-status or non-controller adolescent engages in this form of behaviors only generates that people dislike them. In consequence, the social function of aggression depends on the status and social abilities of the person who displays it.

Regarding differences in prosocial behavior between the resource control profiles, we expected that bistrategic controllers and prosocial controllers would be the most prosocial of all the resource control strategies profiles. However, no differences could be observed between the profiles. This result is against our expectations, but it also highlights the importance of not considering prosocial behavior as the same phenomenon as prosocial strategies. Prosociality in definition is oriented to benefit and help others (Eisenberg, et al., 2006), while prosocial strategies are intentional behaviors oriented to attain self-benefit. Considering the resource control strategies behaviors that are used under social competitions (Hawley, 2003), prosocial strategies appear to be positive forms to convince others or to negotiate with them. In consequence, peers will not observe prosocial strategies as unintentional. While prosocial behaviors, can be considered as spontaneous helping behavior, without no further benefit for the individual whom displays it (Eisenberg, et al, 2006). In consequence, prosocial behaviors and prosocial control behaviors are not conceptually related. This might also explain why in studies that used prosocial behavior and aggressive behavior as proxies of resource control strategies, no bistrategic control profile was found (i.e. Berger, et al., 2015).

Further, not observing differences between the resource control profiles in prosocial behavior indicates that bistrategic controllers, prosocial controllers and non-controllers display similar rates of prosocial behaviors. When addressing the third objective regarding social status, these findings suggest that the effects of prosocial

behavior on popularity and social preference also depend on who displays it. Bistrategic controllers were considered the most popular adolescents, while non-controllers were considered the most unpopular and least socially preferred. Prosocial behavior has been consistently found to be associated with social preference (Findley & Ojanen, 2013), so it is expected to observe that at least a minimum amount of prosocial behavior would help an individual to be less rejected by others (Griese, 2011). However, Hawley and Bower (2018) argued that the use of resource control strategies is associated with social abilities. So, it is probable that there are other behaviors, above prosociality, that are also involved in the attainment of social preference. However, this is an empirical question that should also be addressed in future research.

Continuing with the third objective, Hawley's (2003) social centrality hypothesis is partially supported. The bistrategic controllers are the most popular adolescents in our sample, this indicates that the combination of using coercive and prosocial strategies benefits these adolescents in status attainment. On the other hand, it is important to note that non-controllers did not show differences in popularity with prosocial controllers. This could be because prosocial control is a form of influence that comprises negotiation and reciprocation, which are not always characteristics that adolescents indicate to be 'cool' (Bellmore, et al., 2019). This seems to indicate that in terms of resource control strategies only the combination of coercive and prosocial strategies results in popularity, but the lack of both strategies does not result in unpopularity.

However, regarding social preference, prosocial controllers and bistrategic controllers were found to be the most accepted and liked in the peer network. These results are important because they show that even if bistrategic controllers display aggression they can buffer the rejection this generates with prosocial strategies. During early adolescence, social preference is positively associated with popularity,

but this association starts decreasing in later years of this developmental stage (Cillessen & Borch, 2006). In consequence, there is a possibility that bistrategic controllers might become more rejected and the association found in this study is a result of the developmental stage of the sample. Future longitudinal studies should evaluate and confirm if bistrategic controllers can keep their position in later stages of adolescence. However, these results indicate that the use of resource control strategies is beneficial not only for the attainment of prominence and social dominance, but it is also important for being accepted within the peer network.

Addressing our fourth objective, regarding the role of aggressive and prosocial behaviors in social status attainment, our hypothesis was supported. The probabilities of attaining a high-status position increase when an individual displays aggressive and prosocial behaviors. These results are interesting because previously it was mentioned that aggression and prosocial behaviors are different from coercive and prosocial strategies, yet the use of a combination of aggression and prosocial behavior is still important for attaining a dominant position. In this case these results are in line with Cillessen's (2011) proposal, which also indicates that depending on the social situation a popular adolescent hold, it is possible for him or her to display aggressive or prosocial behaviors in order to serve its social purpose. However, in our study we were also able to identify a prominent profile which had high levels of popularity and the behavioral pattern needed to attain this status profile only included aggression, and not necessarily prosocial behavior. With these results we cannot conclude that high-status individuals are bistrategic controllers because it is plausible that prominent status adolescents are also bistrategic controllers, given that prosocial control is not associated with prosocial behaviors. Furthermore, these two prominent status groups could also be a result of the developmental stage of our sample, given the results from Cillessen and Borch (2006), it is possible that we have identified a high-status group of early adolescents that later will transition to a prominent status,

so it remains unanswered which group should the bistrategic controllers be. Further longitudinal research is necessary to address these questions.

Moreover, the probabilities of being classified in the low-status profile were also increased when early adolescents displayed aggressive behaviors and lower levels of prosocial behavior. This supports previous findings relating aggressive behavior with peer rejection (van den Berg, et al., 2019; Wang, et al. 2019), and also supports previous studies that found a positive association of prosocial behavior and likeability (Berger, et al. 2015; LaFontana & Cillessen, 2002). As mentioned before there might be two explanations behind these different outcomes of the use of aggressive behaviors. First, in this study we were not able to make a differentiation between proactive and reactive aggression. It is probable that high-status and prominent individuals use aggression proactively to achieve their social goals, while low-status individuals might use aggression reactively as retaliation from other peers' transgressions (van den Berg, et al, 2019). It is also possible that high-status and prominent adolescents, and low-status adolescents behaviors' are differently sanctioned by the social context, indicating that when a high-status adolescent behaves aggressively people might justify his or her behavior (Cillessen, 2011). This would reinforce the idea that aggression and prosociality serve social functions depending on the social status of the person whom displays it. However, these hypotheses should be tested in future research.

Finally, regarding the fifth objective about the moderation of social goals on the association between resource control strategies and aggression and prosocial behavior, our hypotheses were rejected. In the present thesis no specific manuscript was written to address this objective; however, the respective analyses were performed. In order to translate and adapt the Social Goals Questionnaire (Jarvinen & Nicholls, 1996), the same procedures and sample as those featured in the first manuscript were used, resulting in a questionnaire comprising 9 items, three items

for popularity goals, three items for dominance goals, and three items for intimacy goals. With the same sample of manuscript two, and using a regression analysis, no moderation effect was observed for none of the associations between resource control strategies and social behavior. These results indicate that social goals are not amplifiers or buffers for aggressive or prosocial behaviors for adolescents that report using a certain resource control strategy. Resource control strategies are already behaviors oriented towards attaining a goal (Hawley, 1999), so it is possible that when an adolescent uses these strategies, they are endorsing specific social goals. In consequence, even if they also endorse other social goals at the moment, these other goals might not play a role.

However, there are some results from the social goals data that are noteworthy. First, prosocial controllers have significantly higher levels of intimacy goals, showing that these adolescents are more oriented towards building positive and meaningful relations with their peers. This indicates that despite popularity goals reach a peak during adolescence (LaFontana & Cillessen, 2010) this group of resource control is not oriented towards it. Furthermore, intimacy goals were positively associated with prosocial behavior, supporting previous findings (Caravita & Cillessen, 2012; Ojanen & Findley-van Nostrad, 2014; Ojanen, et al., 2005).

Regarding popularity goals and dominance goals both were more prevalent in the bistrategic control group. Both social goals are considered part of the agentic goals (Kiefer & Ryan, 2008), so it is expected that bistrategic controllers being adolescents that are oriented towards social dominance, endorse these types of goals. Furthermore, both social goals were positively associated with relational and overt aggression which also supports the results found by Ojanen and Findley-van Nostrad (2014). However, dominance goals were negatively associated with prosocial behavior. This makes an important differentiation between popularity goals and dominance goals. Even if both are oriented towards gaining power and influence

(Jarvinen & Nicholls, 1996; Kiefer & Ryan, 2008), adolescents that endorse popularity goals might display at least some combination of aggressive and prosocial behaviors, given the previous results from this thesis. By contrast, adolescents that endorse dominance goals desire to be feared by others (Jarvinen & Nicholls, 1996; Kiefer & Ryan, 2008), therefore displaying prosocial behaviors would go against this social goal.

Finally, three conclusions can be derived from the studies performed. First, the number of resource control strategies profiles identified with a model-based technique are different from those identified with an arbitrary cut-off criterion; however, the configuration of the ones identified with the model-based technique are similar to Hawley's (2003) proposal. Second, social centrality hypothesis is partially supported; bistrategic controllers are indeed the most popular students and non-controllers are the most unpopular and disliked students. Third, the social function of aggression and prosocial behavior depends on the social status of whom displays it.

Taking all these results together, the present doctoral thesis helps us further understand the contextual and individual complexities of peer adolescents' environments. Even if the Resource Control Theory was partially supported, we need more research to fully understand how the individual characteristics of adolescents interact with the contexts they are immersed. So, in the future we can design specific interventions that allow us to increase the use of prosocial strategies as preferred mechanisms for resource control.

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7. Annexes

7.1 Ethical Review Board Approval



ACTA DE APROBACIÓN ÉTICA DEL COMITÉ ÉTICO CIENTÍFICO DE CIENCIAS SOCIALES, ARTES Y HUMANIDADES

Miembros del Comité

Sra. María Elena Gronemeyer Forni, Presidenta del CEC, Profesora de la Facultad de Comunicaciones UC

Sr. Sergio Martinic Valencia, vicepresidente del CEC, profesor de la Facultad de Educación UC

Sra. Alejandra Santana López, secretaria ejecutiva y ministro de fe del Comité UC

Sra. Inés Contreras Valenzuela, profesora de la Facultad de Educación UC

Sra. Natalia Hernández Mary, trabajadora social, integrante externo

Srta. Javiera Farías Soto, abogada, integrante externo

Sr. Rodrigo López Barreda, médico cirujano, Hospital Clínico Pontificia Universidad Católica de Chile

Sra. Claudia Martínez Alvear, profesora de la Facultad de Economía y Ciencias Administrativas U

Sr. Antonio Mladinic Alonso, profesor de la Facultad de Ciencias Sociales UC

Sra. Paulina Ramos Vergara, abogada, profesora de la Facultad de Medicina UC

Sr. Ignacio Villegas Vergara, profesor de la Facultad de Artes UC

Sr. Andrew Webb, profesor de la Facultad de Ciencias Sociales UC

Participaron en la aprobación del protocolo titulado: *The moderating role of social goals on the relation between resource control strategies and social behavior during early adolescence*

Investigador responsable: Eduardo Franco Chalco, Tesista de Doctorado

Institución: Facultad de Ciencias Sociales, Pontificia Universidad Católica de Chile

Académico responsable: Christian Berger Silva, Profesor Asociado



ACTA DE APROBACIÓN ÉTICA DEL COMITÉ ÉTICO CIENTÍFICO DE CIENCIAS SOCIALES, ARTES Y HUMANIDADES

Institución: Facultad de Ciencias Sociales, Pontificia Universidad Católica de Chile

Financiamiento: Tesis Doctoral con financiamiento CONICYT.

ID Protocolo: 170329003

Documentos revisados y aprobados por el comité:

- Protocolo de evaluación ética de ciencias sociales, artes y humanidades.
- Invitación fase 1 y fase 2.
- Consentimientos informados fase 1 y fase 2.
- Asentimientos informados fase 1 y fase 2.
- Instrumentos de recolección de datos.
- Modelos de cartas de autorización de directores institucionales fase 1 y fase 2.
- Proyecto
- Resumen ejecutivo.
- Certificación en ética de investigación del IR
- Curriculum vitae IR
- Carta Gantt.
- Compromiso del investigador.

Considerando:

1. Que las metodologías, según se describe en el proyecto, aparecen como apropiadas a los objetivos y que en ellas se siguen los estándares internacionales al respecto,

PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE



ACTA DE APROBACIÓN ÉTICA DEL COMITÉ ÉTICO CIENTÍFICO DE CIENCIAS SOCIALES, ARTES Y HUMANIDADES

- 2.** Que los investigadores aludidos ya tienen experiencia realizando este tipo de estudios,

- 3.** Que en toda la información entregada al público invitado a participar se evita entrar en detalles que podrían producir un sesgo o predisponer a los entrevistados a responder de una determinada manera (al hacerles explícitos los objetivos de la investigación por ejemplo) dañando así los objetivos mismos de la investigación,

- 4.** Que ninguno de los métodos importa un riesgo físico para los participantes y que, garantizada la confidencialidad de las identidades de los informantes en la publicación de resultados tampoco importa un riesgo de menoscabo de su intimidad.

Y verificado que en el (los) documento(s) de consentimiento informado mencionado(s) se incluye:

- 1.** Una descripción general de los objetivos de la investigación,

- 2.** Antecedentes sobre el uso que se dará a la información obtenida por cada uno de los procedimientos de investigación a utilizar,

- 3.** Un compromiso respecto de que el uso de dicha información sólo se realizará dentro de los marcos de la presente investigación y para el logro de dichos objetivos,

- 4.** El aseguramiento de la confidencialidad y anonimato de los datos entregados dentro de los marcos propios de cada instrumento,



ACTA DE APROBACIÓN ÉTICA DEL COMITÉ ÉTICO CIENTÍFICO DE CIENCIAS SOCIALES, ARTES Y HUMANIDADES

5. Información sobre la manera que cada instrumento contempla para recabar la información solicitada,
6. Antecedentes respecto del costo en tiempo que tiene la participación en el estudio,
7. La voluntariedad de la participación y la garantía para cada participante de tener la opción hacer abandono del estudio.

Se resuelve respecto de este proyecto:

1. Que están tomadas las precauciones convencionales para el tratamiento ético de la información entregada por las personas que participen en la investigación,
2. Y que ellas lo harán adecuadamente informadas de los objetivos generales de la investigación y del uso que se hará de la información que ellos entreguen, en los plazos necesarios para el éxito de la investigación.

Resolución CEC - Ciencias sociales, artes y humanidades:

Este proyecto ha sido aprobado con fecha 10 de mayo de 2017 en la sesión n°7 del Comité, y tiene vigencia por un año.

El investigador deberá solicitar la renovación al menos 30 días antes del término del período de vigencia del proyecto. El investigador no puede seguir reclutando o investigando con los participantes si no ha recibido aprobación escrita de su solicitud de renovación. Si no se aprueba la continuación de la investigación, el investigador deberá



ACTA DE APROBACIÓN ÉTICA DEL COMITÉ ÉTICO CIENTÍFICO DE CIENCIAS SOCIALES, ARTES Y HUMANIDADES

detener las actividades del proyecto, y no podrá evaluar ni enrolar a ningún nuevo participante y no podrá realizar el análisis de los datos que identifiquen a los participantes.

En la eventualidad de querer incorporar modificaciones, por ejemplo, diseño o rediseño de instrumentos de recolección de datos, cambios en la muestra, el personal a cargo, los procedimientos especificados en el protocolo aprobado u otros, el investigador deberá notificarlo al comité para la evaluación y emisión de una nueva carta de aprobación ética antes de que el investigador ejecute esos cambios.

Los siguientes documentos han sido aprobados y están disponibles para ser descargados:

- Anexo 17. Certificado ético Eduardo Franco
- Anexo 18. Proyecto de investigación E Franco
- Anexo 5. Carta - Invitación al director - 1ra fase
- Anexo 6. Resumen ejecutivo
- Anexo 4. Nominación de pares
- Anexo 7. Curriculum Vitae
- Anexo 8. Carta autorización - 1ra fase
- Anexo 11. Asentimiento focus group - 1ra fase
- Anexo 10. Asentimiento cuestionarios - 1ra fase
- Modelo carta de autorización establecimiento
- Anexo 2. Inventario de Estrategias de Control de Recursos
- Anexo 12. Carta - Invitación al director - 2da fase
- Protocolo Ciencias Sociales Artes y Humanidades
- Anexo 3. Cuestionario de Metas Sociales
- Anexo 1. Cuestionario Sociodemográfico
- Anexo 14. Consentimiento parental - 2da fase
- Compromiso del investigador



**ACTA DE APROBACIÓN ÉTICA DEL COMITÉ ÉTICO CIENTÍFICO DE CIENCIAS
SOCIALES, ARTES Y HUMANIDADES**

- Anexo 9. Consentimiento parental - 1ra fase
- Anexo 13. Carta autorización - 2da fase
- Anexo 15. Asentimiento cuestionarios - 2da fase
- Anexo 16. Carta Gantt

Lo saluda atentamente,

A handwritten signature in black ink, appearing to read 'Alejandra López'.

Alejandra Santana López
Secretaria Ejecutiva

A handwritten signature in blue ink, appearing to read 'M. E. Gronemeyer'.

María Elena Gronemeyer Forni
Presidenta

Santiago, 30 de mayo de 2017

7.2 Phase 1 Invitation Letter for School Principals



CARTA DE AUTORIZACION DEL DIRECTOR DE LA ESCUELA

El rol moderador de los objetivos sociales en la asociación entre las estrategias de control de recursos y la conducta social durante la adolescencia temprana

Eduardo Franco Ch.

Escuela de Psicología, P. Universidad Católica de Chile

Estimado/a Director/a:

A través de esta carta queremos invitar a su institución a participar del proyecto de investigación titulado "El rol moderador de los objetivos sociales en la asociación entre las estrategias de control de recursos y la conducta social durante la adolescencia temprana" a cargo del investigador Eduardo Franco, estudiante del Doctorado en Psicología de la P. Universidad Católica de Chile. El objeto de esta carta es ayudarlo a tomar la decisión de autorizar que la presente investigación se realice con los estudiantes de su institución.

¿Cuál es el propósito de esta investigación?

El objetivo de este proyecto es determinar si los objetivos de ser los más populares, los más rudos, o los más queridos entre sus compañeros pueden gatillar conductas agresivas y/o prosociales en algunos grupos de adolescentes tempranos. Nos interesa identificar estas relaciones para en el futuro poder generar intervenciones que fomenten las relaciones positivas entre pares y así prevenir la emergencia de problemas en los adolescentes.

¿En qué consiste la participación de su institución?

Este proyecto consta de dos fases, la participación de su institución será sólo en la primera fase la cuál se llevará a cabo durante el año 2017. Esta fase consiste en invitar a participar a todos los adolescentes que cursen el segundo ciclo de enseñanza general básica (5to a 8vo año EGB), solicitando la autorización de sus padres y/o apoderados y el asentimiento de los mismos adolescentes para participar. Los estudiantes que participen de este proyecto responderán confidencialmente y de manera colectiva tres cuestionarios. Uno de información sociodemográfica; un segundo relacionado a las conductas que ellos despliegan para lograr sus objetivos; un tercero relacionado a los objetivos sociales que tienen los adolescentes. Por otro lado, se seleccionará aleatoriamente a estudiantes que contestaron el cuestionario para realizar una entrevista grupal, donde se les preguntará acerca de lo que pensaron al momento de responder los cuestionarios. La institución no será responsable del proyecto; sólo se requiere su autorización para contactar a los estudiantes y su respaldo para la aplicación de los cuestionarios en un lugar a definir en conjunto.

¿Cuánto durará la participación?

Las respuestas a los cuestionarios tendrán una duración de alrededor de 40 minutos. Y la entrevista tendrá una duración aproximada de 30 minutos. Sólo al inicio de la investigación solicitaremos a Ud. que firme esta carta de autorización. Ud. podrá retirar su autorización en cualquier momento y sin ninguna consecuencia.

¿Qué riesgos corren los adolescentes al participar?

Participar en este estudio no implica riesgos para los participantes, ya que preguntaremos a los adolescentes sobre cosas relacionadas con su vida cotidiana en el desarrollo de su vida escolar.



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¿Qué beneficios puede tener su participación?

La participación en este estudio no tiene un beneficio directo sobre los participantes, pero sí dos beneficios indirectos a través de la institución educativa, puesto que recibirá un informe general respecto del impacto de ciertas motivaciones sociales en la conducta de los adolescentes; y además, se coordinará con su dependencia para una charla a los profesores sobre el manejo de las conductas agresivas en los estudiantes. Cabe destacar que todos los informes que se entreguen a la institución serán colectivos y no se individualizará la información de ningún estudiante.

¿Qué pasa con la información y datos entregados por los participantes?

Los investigadores mantendrán CONFIDENCIALIDAD con respecto a cualquier información obtenida en este estudio. Toda la información será almacenada con códigos, por lo que el nombre de cada participante, así como de las instituciones participantes, no aparecerá junto con sus respuestas o con los informes entregados. La información recolectada será custodiada por el investigador responsable y será utilizada exclusivamente para fines de investigación y difusión científica a cargo exclusivamente de los investigadores asociados al proyecto. Una vez terminado el estudio, todos los datos que permitan identificar a las instituciones o sujetos participantes serán eliminados, de manera de asegurar el anonimato en caso de usar esta información en futuros estudios. En el caso remoto que durante el transcurso de este estudio se revele información que indique un riesgo mayor para algún participante, la confidencialidad podría verse quebrantada para prevenir dicho riesgo.

¿Es obligación participar?

Los adolescentes NO están obligados de ninguna manera a participar en este estudio. El día de la aplicación de los cuestionarios se preguntará a cada adolescente que haya sido autorizado por sus padres y/o apoderados si está dispuesto a participar. Tanto el padre/apoderado como el estudiante podrán retirar su autorización para participar en cualquier momento que estimen conveniente o bien no responder algunas preguntas sin que esto tenga ninguna consecuencia para ellos.

¿A quién puede contactar para saber más de este estudio o si le surgen dudas?

Si tiene cualquier pregunta acerca de esta investigación, puede contactar a Eduardo Franco, Escuela de Psicología, P. Universidad Católica de Chile. Su teléfono es el 951372683 y su email es efranco1@uc.cl. Si usted tiene alguna consulta o preocupación respecto a sus derechos como participante de este estudio, puede contactar al Comité de Ética de la Escuela de Psicología de la Pontificia Universidad Católica de Chile al fono 23545883 o al siguiente email: comite.etica.psicologia@uc.cl



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HE TENIDO LA OPORTUNIDAD DE LEER ESTA DECLARACIÓN DE CONSENTIMIENTO INFORMADO, HACER PREGUNTAS ACERCA DEL PROYECTO DE INVESTIGACIÓN, Y ACEPTO PARTICIPAR EN ESTE PROYECTO.

_____ Nombre del Director/a	_____ Institución
_____ Firma del Director/a	_____ Fecha
_____ Firma del Investigador	_____ Fecha

(Firmas en duplicado: una copia para el Director y otra para el investigador)

7.3 Phase 1 Parental Consent



CARTA DE CONSENTIMIENTO INFORMADO PARA PADRES DE FAMILIA Y APODERADOS
El rol moderador de los objetivos sociales en la asociación entre las estrategias de control de recursos y la conducta social durante la adolescencia temprana
Eduardo Franco Ch.
Escuela de Psicología, P. Universidad Católica de Chile

Estimado padre y/o apoderado:

Su hijo/a ha sido invitado a participar en el proyecto de investigación titulado "El rol moderador de los objetivos sociales en la asociación entre las estrategias de control de recursos y la conducta social durante la adolescencia temprana" a cargo del investigador Eduardo Franco, estudiante del Doctorado en Psicología de la P. Universidad Católica de Chile. El objeto de esta carta es ayudarlo a tomar la decisión de autorizar o no que su hijo/a participe de este estudio.

¿Cuál es el propósito de esta investigación?

El objetivo de este proyecto es determinar si los objetivos de ser los más populares, los más rudos, o los más queridos entre sus compañeros pueden gatillar conductas agresivas y/o prosociales en algunos grupos de adolescentes tempranos. Nos interesa identificar estas relaciones para en el futuro poder generar intervenciones que fomenten las relaciones positivas entre pares y así prevenir la emergencia de problemas en los adolescentes.

¿En qué consiste su participación?

Este proyecto consta de dos fases, si su hijo/a participa de este proyecto formará parte de la primera fase la cuál se llevará a cabo durante el año 2017. Esta fase consiste que su hijo/a responderá confidencialmente y de manera colectiva tres cuestionarios. Uno de información sociodemográfica; un segundo relacionado a las conductas que el/ella despliega para lograr sus objetivos; y un tercero relacionado a sus objetivos sociales. Posteriormente, se seleccionarán al azar algunos estudiantes, entre los cuales podría estar su hijo/a, para realizar una entrevista grupal en la cuál se les preguntará acerca de lo que pensaron mientras contestaban los cuestionarios. Para cada una de estas instancias solicitaremos el asentimiento de su hijo/a para participar.

¿Cuánto durará la participación?

Las respuestas a los cuestionarios tendrán una duración de alrededor de 40 minutos. Y la entrevista grupal tiene una duración aproximada de 30 minutos. Sólo al inicio de la investigación solicitaremos a Ud. que firme esta carta de consentimiento. No obstante, Ud. podrá retirar su autorización en cualquier momento sin necesidad de justificar los motivos, y sin ninguna consecuencia para su hijo/a.

¿Qué riesgos corren los adolescentes al participar?

Participar en este estudio no implica riesgos para los participantes, ya que preguntaremos a los adolescentes sobre cosas relacionadas con su vida cotidiana en el desarrollo de su vida escolar.

¿Qué beneficios puede tener su participación?

La participación en este estudio no tiene un beneficio directo para su hijo/a. No obstante, la comprensión que logremos de las relaciones interpersonales de los adolescentes permitirá mejorar las formas de convivencia en las instituciones educativas y generar ambientes favorables para el desarrollo integral de los estudiantes.



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¿Qué pasa con la información y datos entregados por los participantes?

Los investigadores mantendrán CONFIDENCIALIDAD con respecto a cualquier información obtenida en este estudio. Toda la información será almacenada con códigos, por lo que el nombre de cada participante, así como de las instituciones participantes, no aparecerá junto con sus respuestas o con los informes entregados. La información recolectada será custodiada por el investigador responsable y será utilizada exclusivamente para fines de investigación y difusión científica a cargo exclusivamente de los investigadores asociados al proyecto. Una vez terminado el estudio, todos los datos que permitan identificar a las instituciones o sujetos participantes serán eliminados, de manera de asegurar el anonimato en caso de usar esta información en futuros estudios. En el caso remoto que durante el transcurso de este estudio se revele información que indique que algún participante es víctima de abuso, acoso o cualquier otro riesgo mayor, la confidencialidad podría verse quebrantada para prevenir dicho riesgo, informando a la dirección de la escuela, además del Comité de Ética de la Escuela de Psicología de la Universidad Católica.

¿Es obligación participar?

Los adolescentes NO están obligados de ninguna manera a participar en este estudio. El día de la aplicación de los cuestionarios y la entrevista se preguntará a cada adolescente que haya sido autorizado por sus padres y/o apoderados si está dispuesto a participar. Tanto el padre/apoderado como el estudiante podrán retirar su autorización para participar en cualquier momento que estimen conveniente o bien no responder algunas preguntas sin que esto tenga ninguna consecuencia para ellos.

¿A quién puede contactar para saber más de este estudio o si le surgen dudas?

Si tiene cualquier pregunta acerca de esta investigación, puede contactar a Eduardo Franco, Escuela de Psicología, P. Universidad Católica de Chile. Su teléfono es el 951372683 y su email es efranco1@uc.cl. Si usted tiene alguna consulta o preocupación respecto a sus derechos como participante de este estudio, puede contactar al Comité de Ética de la Escuela de Psicología de la Pontificia Universidad Católica de Chile al fono 23545883 o al siguiente email: comite.etica.psicologia@uc.cl



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HE TENIDO LA OPORTUNIDAD DE LEER ESTA DECLARACIÓN DE CONSENTIMIENTO INFORMADO, HACER PREGUNTAS ACERCA DEL PROYECTO DE INVESTIGACIÓN, Y ACEPTO PARTICIPAR EN LAS SIGUIENTES PARTES DE ESTE:

	SI	NO
Aplicación de cuestionarios		
Entrevista grupal		

Nombre del estudiante

Nombre del padre/apoderado
y relación de parentesco con el estudiante

Firma del padre/apoderado

Fecha

Firma del Investigador

Fecha

(Firmas en duplicado: una copia para el Director y otra para el investigador)

7.4 Phase 1 Informed Assent for Survey Collection

Aseñtimiento Informado Para Estudiantes

He sido invitado a ser parte de un estudio sobre las relaciones con mis compañeros en el colegio, a cargo del investigador Eduardo Franco, de la Escuela de Psicología de la P. Universidad Católica de Chile. En este estudio se me pedirá que responda distintos cuestionarios sobre mí, también sobre algunas situaciones que prefiero por sobre otras.

Algunas cosas importantes de mi participación:

- Mi participación en este estudio es voluntaria, y aunque mis papás hayan autorizado mi participación, yo puedo negarme a participar.
- Mis respuestas son privadas y solo serán conocidas por los investigadores responsables. Pero en el remoto caso de detectarse algún riesgo de abuso o acoso para un compañero o para mí, los investigadores se verán en la obligación de informar al director de la escuela.
- Si durante ésta actividad me siento incómodo o no es de mi agrado puedo retirarme en cualquier momento y esto no tendrá ninguna consecuencia para mí.
- Si no me siento comodo respondiendo algunas preguntas puedo dejarlas en blanco sin que esto cause ningún problema.
- La respuesta a estos cuestionarios tomarán aproximadamente 20 minutos.
- La dirección de mi colegio y/o los encargados de la actividad en que participo han autorizado esta investigación, y mis padres y/o apoderados me han autorizado a participar.
- Puedo contactarme con el investigador principal: efranco1@uc.cl o al teléfono 951372683, en el momento que lo estime necesario para consultar acerca de mi participación este estudio.
- Si tengo alguna consulta respecto de mis derechos como participante de este estudio, puedo contactar al Comité de Ética de la Escuela de Psicología de la Pontificia Universidad Católica de Chile al fono 23545883 o al siguiente email: comite.etica.psicologia@uc.cl



Tu participación en este proyecto nos ayudará a aprender más las relaciones de adolescentes en las escuelas. Si estás de acuerdo en participar, por favor firma a continuación. Si no entiendes bien, avísanos para poder ayudarte.

Yo (nombre) _____ acepto participar voluntariamente en el presente estudio. Fecha: _____

(Firmas en duplicado: una copia para el participante y otra para el investigador)

7.5 Phase 1 Informed Assent for Focus Group

Asentimiento Informado Para Estudiantes

He sido invitado a ser parte de un estudio sobre las relaciones con mis compañeros en el colegio, a cargo del investigador Eduardo Franco, de la Escuela de Psicología de la P. Universidad Católica de Chile. En este estudio se me entrevistarán grupalmente sobre mis pensamientos acerca de los cuestionarios de este estudio que respondí hace un tiempo. Esta será una sola entrevista en el presente año académico.

Algunas cosas importantes de mi participación:

- Mi participación en este estudio es voluntaria, y aunque mis papás hayan autorizado mi participación, yo puedo negarme a participar.
- Mis respuestas son privadas y solo serán conocidas por los investigadores responsables. Pero en el remoto caso de detectarse algún riesgo de abuso o acoso para un compañero o para mí, los investigadores se verán en la obligación de informar al director de la escuela.
- Si durante ésta actividad me siento incómodo o no es de mi agrado puedo retirarme en cualquier momento y esto no tendrá ninguna consecuencia para mí.
- Si no me siento comodo respondienddo algunas preguntas puedo no responderlas sin que esto cause ningún problema.
- La entrevista tomarán aproximadamente 30 minutos.
- La dirección de mi colegio y/o los encargados de la actividad en que participo han autorizado esta investigación, y mis padres y/o apoderados me han autorizado a participar.
- Puedo contactarme con el investigador principal: efranco1@uc.cl o al teléfono 951372683, en el momento que lo estime necesario para consultar acerca de mi participación este estudio
- Si tengo alguna consulta respecto de mis derechos como participante de este estudio, puedo contactar al Comité de Ética de la Escuela de Psicología de la Pontificia Universidad Católica de Chile al fono 23545883 o al siguiente email: comite.etica.psicologia@uc.cl



Tu participación en este proyecto nos ayudará a aprender más las relaciones de adolescentes en las escuelas. Si estás de acuerdo en participar, por favor firma a continuación. Si no entiendes bien, avísanos para poder ayudarte.

Yo (nombre) _____ acepto participar voluntariamente en el presente estudio. Fecha: _____

(Firmas en duplicado: una copia para el participante y otra para el investigador)

7.6 Phase 2 Invitation Letter for School Principals



CARTA DE AUTORIZACION DEL DIRECTOR DE LA ESCUELA

El rol moderador de los objetivos sociales en la asociación entre las estrategias de control de recursos y la conducta social durante la adolescencia temprana

Eduardo Franco Ch.

Escuela de Psicología, P. Universidad Católica de Chile

Estimado/a Director/a:

A través de esta carta queremos invitar a su institución a participar del proyecto de investigación titulado “El rol moderador de los objetivos sociales en la asociación entre las estrategias de control de recursos y la conducta social durante la adolescencia temprana” a cargo del investigador Eduardo Franco, estudiante del Doctorado en Psicología de la P. Universidad Católica de Chile. El objeto de esta carta es ayudarlo a tomar la decisión de autorizar que la presente investigación se realice con los estudiantes de su institución.

¿Cuál es el propósito de esta investigación?

El objetivo de este proyecto es determinar si los objetivos de ser los más populares, los más rudos, o los más queridos entre sus compañeros pueden gatillar conductas agresivas y/o prosociales en algunos grupos de adolescentes tempranos. Nos interesa identificar estas relaciones para en el futuro poder generar intervenciones que fomenten las relaciones positivas entre pares y así prevenir la emergencia de problemas en los adolescentes.

¿En qué consiste la participación de su institución?

Este proyecto consta de dos fases, la participación de su institución será sólo de la segunda fase la cuál se llevará a cabo durante el año 2018. Esta fase consiste en invitar a participar a todos los adolescentes que cursen el segundo ciclo de enseñanza general básica (5to a 8vo año EGB), solicitando la autorización de sus padres y/o apoderados y el asentimiento de los mismos adolescentes para participar. Los estudiantes que participen de este proyecto responderán confidencialmente y de manera colectiva cuatro cuestionarios. Uno de información sociodemográfica; un segundo relacionado a las conductas que ellos despliegan para lograr sus objetivos; un tercero relacionado a los objetivos sociales que tienen los adolescentes; y por último, responderán un cuestionario con preguntas sobre sus impresiones respecto de sus compañeros. Solicitaremos también el acceso a los registros académicos de los estudiantes, pues se conoce que el desempeño académico tiene un impacto sobre el despliegue de las conductas sociales. La institución no será responsable del proyecto; sólo se requiere su autorización para contactar a los estudiantes y su respaldo para la aplicación de los cuestionarios en un lugar a definir en conjunto.

¿Cuánto durará la participación?

Las respuestas a los cuestionarios tendrán una duración de alrededor de 60 minutos. Nos interesa saber especialmente cómo estos procesos van evolucionando en el tiempo, por lo que este estudio se desarrollará durante el año académico, y pediremos la participación de los estudiantes en dos ocasiones durante este año. Sólo en la primera etapa solicitaremos a Ud. que firme esta carta de autorización. Ud. podrá retirar su autorización en cualquier momento y sin ninguna consecuencia.

¿Qué riesgos corren los adolescentes al participar?

Participar en este estudio no implica riesgos para los participantes, ya que preguntaremos a los adolescentes sobre cosas relacionadas con su vida cotidiana en el desarrollo de su vida escolar.



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¿Qué beneficios puede tener su participación?

La participación en este estudio no tiene un beneficio directo sobre los participantes, pero sí dos beneficios indirectos a través de la institución educativa, puesto que recibirá un informe general respecto del impacto de ciertas motivaciones sociales en la conducta y estatus de los adolescentes; y además, se coordinará con su dependencia para una charla a los profesores sobre el manejo de las conductas agresivas en los estudiantes. Cabe destacar que todos los informes que se entreguen a la institución serán colectivos y no se individualizará la información de ningún estudiante.

¿Qué pasa con la información y datos entregados por los participantes?

Los investigadores mantendrán CONFIDENCIALIDAD con respecto a cualquier información obtenida en este estudio. Toda la información será almacenada con códigos, por lo que el nombre de cada participante, así como de las instituciones participantes, no aparecerá junto con sus respuestas o con los informes entregados. La información recolectada será custodiada por el investigador responsable y será utilizada exclusivamente para fines de investigación y difusión científica a cargo exclusivamente de los investigadores asociados al proyecto. Una vez terminado el estudio, todos los datos que permitan identificar a las instituciones o sujetos participantes serán eliminados, de manera de asegurar el anonimato en caso de usar esta información en futuros estudios. En el caso remoto que durante el transcurso de este estudio se revele información que indique un riesgo mayor para algún participante, la confidencialidad podría verse quebrantada para prevenir dicho riesgo.

¿Es obligación participar?

Los adolescentes NO están obligados de ninguna manera a participar en este estudio. El día de la primera aplicación de los cuestionarios se preguntará a cada adolescente que haya sido autorizado por sus padres y/o apoderados si está dispuesto a participar. Tanto el padre/apoderado como el estudiante podrán retirar su autorización para participar en cualquier momento que estimen conveniente o bien no responder algunas preguntas sin que esto tenga ninguna consecuencia para ellos.

¿A quién puede contactar para saber más de este estudio o si le surgen dudas?

Si tiene cualquier pregunta acerca de esta investigación, puede contactar a Eduardo Franco, Escuela de Psicología, P. Universidad Católica de Chile. Su teléfono es el 951372683 y su email es efranco1@uc.cl. Si usted tiene alguna consulta o preocupación respecto a sus derechos como participante de este estudio, puede contactar al Comité de Ética de la Escuela de Psicología de la Pontificia Universidad Católica de Chile al fono 23545883 o al siguiente email: comite.etica.psicologia@uc.cl



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DE CHILE

HE TENIDO LA OPORTUNIDAD DE LEER ESTA DECLARACIÓN DE CONSENTIMIENTO INFORMADO, HACER PREGUNTAS ACERCA DEL PROYECTO DE INVESTIGACIÓN, Y ACEPTO PARTICIPAR EN ESTE PROYECTO.

_____	_____
Nombre del Director/a	Institución
_____	_____
Firma del Director/a	Fecha
_____	_____
Firma del Investigador	Fecha

(Firmas en duplicado: una copia para el Director y otra para el investigador)

7.7 Phase 2 Parental Informed Consent



CARTA DE CONSENTIMIENTO INFORMADO PARA PADRES DE FAMILIA Y APODERADOS

El rol moderador de los objetivos sociales en la asociación entre las estrategias de control de recursos y la conducta social durante la adolescencia temprana

Eduardo Franco Ch.

Escuela de Psicología, P. Universidad Católica de Chile

Estimado padre y/o apoderado:

Su hijo/a ha sido invitado a participar en el proyecto de investigación titulado “El rol moderador de los objetivos sociales en la asociación entre las estrategias de control de recursos y la conducta social durante la adolescencia temprana” a cargo del investigador Eduardo Franco, estudiante del Doctorado en Psicología de la P. Universidad Católica de Chile. El objeto de esta carta es ayudarlo a tomar la decisión de autorizar o no que su hijo/a participe de este estudio.

¿Cuál es el propósito de esta investigación?

El objetivo de este proyecto es determinar si los objetivos de ser los más populares, los más rudos, o los más queridos entre sus compañeros pueden gatillar conductas agresivas y/o prosociales en algunos grupos de adolescentes tempranos. Nos interesa identificar estas relaciones para en el futuro poder generar intervenciones que fomenten las relaciones positivas entre pares y así prevenir la emergencia de problemas en los adolescentes.

¿En qué consiste su participación?

Este proyecto consta de dos fases, si su hijo/a participa de este proyecto formará parte de la segunda fase la cuál se llevará a cabo durante el año 2018. Esta fase consiste que su hijo/a responderá confidencialmente y de manera colectiva cuatro cuestionarios. Uno de información sociodemográfica; un segundo relacionado a las conductas que el/ella despliega para lograr sus objetivos; un tercero relacionado a sus objetivos sociales; y por último, responderá un cuestionario con preguntas sobre sus impresiones respecto de sus compañeros. Solicitaremos también el acceso a los registros académicos de su hijo/a, pues se conoce que el desempeño académico tiene un impacto sobre el despliegue de las conductas sociales.

¿Cuánto durará la participación?

Las respuestas a los cuestionarios tendrán una duración de alrededor de 60 minutos. Nos interesa saber especialmente cómo estos procesos van evolucionando en el tiempo, por lo que este estudio se desarrollará durante el año académico, y pediremos la participación de su hijo/a en dos ocasiones durante este año. Sólo al inicio de la investigación solicitaremos a Ud. que firme esta carta de consentimiento. No obstante, Ud. podrá retirar su autorización en cualquier momento sin necesidad de justificar los motivos, y sin ninguna consecuencia para su hijo/a.

¿Qué riesgos corren los adolescentes al participar?

Participar en este estudio no implica riesgos para los participantes, ya que preguntaremos a los adolescentes sobre cosas relacionadas con su vida cotidiana en el desarrollo de su vida escolar.



¿Qué beneficios puede tener su participación?

La participación en este estudio no tiene un beneficio directo para su hijo/a. No obstante, la comprensión que logremos de las relaciones interpersonales de los adolescentes permitirá mejorar las formas de convivencia en las instituciones educativas y generar ambientes favorables para el desarrollo integral de los estudiantes.

¿Qué pasa con la información y datos entregados por los participantes?

Los investigadores mantendrán CONFIDENCIALIDAD con respecto a cualquier información obtenida en este estudio. Toda la información será almacenada con códigos, por lo que el nombre de cada participante, así como de las instituciones participantes, no aparecerá junto con sus respuestas o con los informes entregados. La información recolectada será custodiada por el investigador responsable y será utilizada exclusivamente para fines de investigación y difusión científica a cargo exclusivamente de los investigadores asociados al proyecto. Una vez terminado el estudio, todos los datos que permitan identificar a las instituciones o sujetos participantes serán eliminados, de manera de asegurar el anonimato en caso de usar esta información en futuros estudios. En el caso remoto que durante el transcurso de este estudio se revele información que indique que algún participante es víctima de abuso, acoso o cualquier otro riesgo mayor, la confidencialidad podría verse quebrantada para prevenir dicho riesgo, informando a la dirección de la escuela, además del Comité de Ética de la Escuela de Psicología de la Universidad Católica.

¿Es obligación participar?

Los adolescentes NO están obligados de ninguna manera a participar en este estudio. El día de la aplicación de los cuestionarios y la entrevista se preguntará a cada adolescente que haya sido autorizado por sus padres y/o apoderados si está dispuesto a participar. Tanto el padre/apoderado como el estudiante podrán retirar su autorización para participar en cualquier momento que estimen conveniente o bien no responder algunas preguntas sin que esto tenga ninguna consecuencia para ellos.

¿A quién puede contactar para saber más de este estudio o si le surgen dudas?

Si tiene cualquier pregunta acerca de esta investigación, puede contactar a Eduardo Franco, Escuela de Psicología, P. Universidad Católica de Chile. Su teléfono es el 951372683 y su email es efranco1@uc.cl. Si usted tiene alguna consulta o preocupación respecto a sus derechos como participante de este estudio, puede contactar al Comité de Ética de la Escuela de Psicología de la Pontificia Universidad Católica de Chile al fono 23545883 o al siguiente email: comite.etica.psicologia@uc.cl



HE TENIDO LA OPORTUNIDAD DE LEER ESTA DECLARACIÓN DE CONSENTIMIENTO INFORMADO, HACER PREGUNTAS ACERCA DEL PROYECTO DE INVESTIGACIÓN, Y ACEPTO PARTICIPAR EN ESTE PROYECTO.

_____ Nombre del estudiante	_____ Nombre del apoderado/a y relación de parentesco con el estudiante
_____ Firma del apoderado/a	_____ Fecha
_____ Firma del Investigador	_____ Fecha

(Firmas en duplicado: una copia para el apoderado/a y otra para el investigador)

7.8 Phase 2 Informed Assent

Asentimiento Informado Para Estudiantes

He sido invitado a ser parte de un estudio sobre las relaciones con mis compañeros en el colegio, a cargo del investigador Eduardo Franco, de la Escuela de Psicología de la P. Universidad Católica de Chile. En este estudio se me pedirá que responda distintos cuestionarios sobre mí; también sobre algunas situaciones que prefiero por sobre otras; además, los comportamientos que tengo para lograr mis objetivos; y por último, responderé algunas preguntas respecto de las impresiones que tengo de mis compañeros. Este estudio se realizará en dos ocasiones durante el presente año académico.

Algunas cosas importantes de mi participación:

- Mi participación en este estudio es voluntaria, y aunque mis papás hayan autorizado mi participación, yo puedo negarme a participar.
- Mis respuestas son privadas y solo serán conocidas por los investigadores responsables. Pero en el remoto caso de detectarse algún riesgo de abuso o acoso para un compañero o para mí, los investigadores se verán en la obligación de informar al director de la escuela.
- Si durante ésta actividad me siento incómodo o no es de mi agrado puedo retirarme en cualquier momento y esto no tendrá ninguna consecuencia para mí.
- Si no me siento comodo respondienddo algunas preguntas puedo dejarlas en blanco sin que esto cause ningún problema.
- La respuesta a estos cuestionarios tomarán aproximadamente una hora.
- La dirección de mi colegio y/o los encargados de la actividad en que participo han autorizado esta investigación, y mis padres y/o apoderados me han autorizado a participar.
- Puedo contactarme con el investigador principal: efranco1@uc.cl o al teléfono 951372683, en el momento que lo estime necesario para consultar acerca de mi participación este estudio
- Si tengo alguna consulta respecto de mis derechos como participante de este estudio, puedo contactar al Comité de Ética de la Escuela de Psicología de la Pontificia Universidad Católica de Chile al fono 23545883 o al siguiente email: comite.etica.psicologia@uc.cl



Tu participación en este proyecto nos ayudará a aprender más las relaciones de adolescentes en las escuelas. Si estás de acuerdo en participar, por favor firma a continuación. Si no entiendes bien, avísanos para poder ayudarte.

Yo (nombre) _____ **acepto participar voluntariamente en el presente estudio. Fecha:** _____

(Firmas en duplicado: una copia para el participante y otra para el investigador)

7.9 Resource Control Strategies Inventory (Spanish version)

Muchas veces nos vemos en situaciones en las que queremos que nuestros compañeros y/o compañeras hagan algo que nosotros queremos. Por ejemplo, jugar nuestro juego favorito, que nos acompañen al quiosco, ver las películas que a nosotros queremos, etc. Para lograr esto todos nos comportamos de manera distinta. Marca con una X la respuesta que mejor describa como te comportas en esas situaciones. No existen respuestas buenas ni malas, por lo cuál te pedimos que respondas con total sinceridad. Marca solo una respuesta por afirmación.

	Nunca	Pocas veces	Muchas veces	Siempre
Tiendo a lograr que mis compañeros(as) hagan lo que yo quiero diciendo cosas buenas de ellos(ellas).				
Tiendo a lograr que mis compañeros(as) hagan lo que yo quiero explicándoles por qué sería bueno hacer lo que yo digo.				
Tiendo a engañar a mis compañeros(as) para conseguir algo de ellos(ellas).				
Tiendo a conseguir que mis compañeros(as) hagan lo que yo quiero prometiéndoles algo a cambio que sé que puedo cumplir.				
Tiendo a conseguir lo que yo quiero haciendo creer a mis compañeros(as) que estoy molesto(a).				
Tiendo a conseguir que mis compañeros(as) hagan lo que yo quiero haciendo cosas buenas por ellos(ellas).				
Tiendo a obligar a mis compañeros(as) a hacer las cosas que yo quiero.				
Tiendo a conseguir que mis compañeros(as) hagan lo que yo quiero convirtiéndome en su amigo(a).				
Tiendo a usar mi fuerza física para conseguir que mis compañeros(as) me den lo que yo quiero.				
Tiendo a presionar a mis compañeros(as) para conseguir lo que yo quiero.				
Tiendo a lograr que mis compañeros(as) hagan lo que yo quiero siendo amable.				

7.10 Social Goals Questionnaire (Spanish Version)

Todas las personas tenemos prioridades distintas cuando estamos entre compañeros de nuestra edad. Para algunos es importante tener muchos amigos, otros podrían preferir ser más cercanos con un grupo pequeño de amigos, etc. A continuación, encontrarás afirmaciones relacionadas a estas preferencias. Marca con una X la respuesta que mejor describa tus preferencias. No existen respuestas correctas ni incorrectas, por lo que te pedimos que respondas con sinceridad. Marca sólo una respuesta por pregunta:

1	2	3	4	5
Nada cierto para mí	Poco cierto para mí	Cierto para mí	Bastante cierto para mí	Completamente cierto para mí

	1	2	3	4	5
Para mí es importante que cuando estoy con compañeros de mi edad pueda hacerlos(as) sentir contentos.					
Para mí es importante, cuando estoy con compañeros de mi edad, ser el(la) más popular.					
Cuando estoy con compañeros de mi edad, para mí es importante que crean que soy más rudo(a) que ellos(ellas)					
Para mí es importante que cuando estoy con compañeros de mi edad entiendan cómo me siento.					
Para mí es importante que cuando estoy con compañeros de mi edad yo les agrade más que otros(as) compañeros(as).					
A mí me gusta que cuando estoy con compañeros de mi edad me tengan miedo.					
A mí me gusta que cuando estoy con compañeros de mi edad pueda esforzarme por ayudarlos(as).					
A mí me gusta que cuando estoy con compañeros de mi edad todos(as) quieran ser mi amigo(a).					
A mí me gusta que cuando estoy con compañeros de mi edad hagan lo que yo quiero.					