

# **Me, Myself, and my Community**

Antecedents, Processes, and Effects of Adolescent Volunteering

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# **Me, Myself, and my Community**

Antecedents, Processes, and Effects of Adolescent Volunteering

## **Ik, Mijzelf en mijn Gemeenschap**

Antecedenten, Processen en Effecten van het Vrijwilligerswerk

door Adolescenten

(met een samenvatting in het Nederlands)

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# 1

**General introduction**

## Background

“Generation me” is a popular term media use to describe youth of this generation. As the American hip-hop trio “De La Soul” already sang in 1989, adolescents’ main concern would be “me, myself, and I”. Adolescents are often accused of being individualistic and uninvolved in their community and society (e.g., Harris, Wyn, & Younes, 2010). They would thus lack a sense of citizenship and civic engagement. Opposing this view, an increasing amount of empirical evidence suggests that adolescents do value and consider the perspectives and needs of others, and are (therefore) thought to have a great potential to become civically engaged (e.g., Eisenberg, Cumberland, Guthrie, Murphy, & Shephard, 2005; Harris et al., 2010). Moreover, a substantial number of adolescents already is civically engaged, such as by performing volunteering activities (e.g., Corporation for National and Community Service, 2013). *Volunteering* generally involves: “activities within an organization, society, or club, which are intended to positively contribute to the environment, individuals, groups of people, or the society as a whole, without receiving money (small compensations are allowed)” (cf. National Centre for Social Research and the Institute for Volunteering Research, 2007; van Goethem et al., 2012). These activities mainly include leisure-time related activities such as coaching a soccer team, care-related activities such as domestic work, education-related activities such as tutoring, or, to a lesser extent, politically-related activities such as boycotting products or demonstrating for a cause.

Volunteering is one of the most common forms by which young people express their civic engagement. For example, a survey by the Corporation for National and Community Service (2013) showed that, between 2009 and 2011, 21.6 % of US citizens under the age of 30 volunteered compared to 26.8 % in the general population. In the Netherlands, the percentage of young volunteers seems to be even higher. In one study, conducted in 2010, it was estimated that 35.4% of the people under the age of 30 performed volunteering activities, compared to 41% of the general population (Bekkers & Boezeman, 2011). Another study estimated that between 40.3% and 52.5% of Dutch citizens between 15 and 34 years old volunteered, compared to 45.1% of volunteers in the general population. In the latter study, the youngest subgroup of 15 to 17 year olds (adolescents) even had the highest percentage of volunteers (52.5%; Houben-van Herte & te Riele, 2011). The exact percentage of volunteers is difficult to determine and to compare between studies and countries. This is for example due to differences between studies in the timing of data collection, the sample that is used, the definition of volunteering that is adopted, and in the method that is used to estimate the percentage of volunteers (e.g., whether this percentage is corrected for selective non-response). However, the estimated percentages of these studies can be useful to determine general volunteering trends in the population (e.g., Toppe, 2005).

## Goals of this thesis

Overall, a relatively large percentage of young people, including adolescents, is civically engaged by performing volunteering and the number of young volunteers seems to be comparable to the general population. Still, at least half of these youngsters do not perform volunteering. How can this be explained? Or more generally, what factors contribute to volunteering by young people such as by adolescents?

The current thesis aims to contribute to answering this question. The first goal of this thesis is to examine the role of personal and social factors in adolescents' volunteering. More specifically, we examine whether and how adolescents' volunteering can be explained by *personal factors*, particularly adolescents' morality and identity, and by *social factors*, particularly the volunteering by adolescents' parents and friends, the families' civic orientation, and being given the opportunity to volunteer in organized 'volunteering programs'. As society benefits from adolescents' volunteering, gaining knowledge of factors that contribute to volunteering is not only valuable from a theoretical perspective but also from a practical point of view: it could give more insight into how adolescents' volunteering can be stimulated.

Related to this issue, it is also important to know whether adolescents' volunteering may not only benefit society but also may benefit and influence adolescents themselves. The second goal of this thesis is therefore to examine how volunteering influences adolescents' development, particularly their identity and morality. Further, we examine whether and how these volunteering effects are influenced by adolescents' characteristics (e.g., age) and volunteering characteristics (especially reflection; e.g., Ogden & Claus, 2006). Gaining knowledge on the impact of these characteristics can not only give insight in when, but maybe also in how volunteering may influence adolescents' development. Further, this knowledge may be used to optimize service effects.

### Outline

The two main goals of this thesis were addressed in four studies (chapter 2 until chapter 5).

**Study 1.** In the first study, which is presented in chapter 2, we examined the role of various aspects of adolescents' morality and identity in their volunteering behavior. Adolescents' morality and identity are considered important personal factors in explaining adolescents' volunteering (e.g., Matsuba, Hart, & Atkins, 2007). Morality is considered important because volunteering is often experienced as a moral act: as something which is intended to benefit others' well-being and/or the common good (e.g., Metzger & Smetana, 2009). A further developed moral conscience, which involves thoughts and reasoning, emotions, and commitments related to these well-being-related acts, can therefore be an important motivation for adolescents to volunteer (cf. Rest, Narvaez, Bebeau, & Thoma, 1999). For example, adolescents can be stimulated to volunteer when they adopt a higher level of moral reasoning and understanding, which means that others' needs are taken into account when making judgments about what is the right course of action, and when feeling personally committed to this course of action (cf. Eisenberg, Carlo, Murphy, & van Court, 1995; Lies & Bock, 2008; Matsuba et al., 2007).

Research on identity (i.e. the sense of who you are) and volunteering in adolescence has mainly focused on volunteering as becoming part of and relating oneself to society. Adolescents can participate in different societal contexts, such as school, home, and leisure. In these contexts they can explore different roles, values and ideologies, which can contribute to becoming healthy members of society. These societal contexts can also become part of adolescents' identity, also referred to as their "identity contexts".

Not all adolescents, however, participate in the same number of identity contexts and adolescents differ on the extent to which they feel to be the same person over these contexts over time which is also referred to as the level of “identity integration” (i.e. a more unified sense of identity; van Hoof & Raaijmakers, 2002). These two aspects of adolescents’ identity are suggested to be related to each other and are both expected to be positively related to adolescents’ volunteering. A relatively stronger identity integration is related to a higher level of well-being and is considered a solid basis for further identity exploration by for instance extending one’s identity to more identity contexts in society. It is therefore also expected that adolescents who have a relatively stronger identity integration are more likely to explore and incorporate new experiences and behaviors into their identity such as volunteering (van Hoof & Raaijmakers, 2002).

There is some indication that adolescents’ morality and identity may also influence each other’s effects on adolescents’ volunteering (e.g., Hardy, 2006; Matsuba et al., 2007; Pitt & Thoma, 2005). For example, adolescents’ commitment to act upon moral issues in society is likely to change or broaden adolescents’ identity horizon to societal (identity) contexts such as volunteering (van Hoof & Raaijmakers, 2002).

We examined these hypothesized relations between adolescents’ volunteering, identity, and morality in study 1, using cross-sectional data from 698 Dutch adolescents (47.7% male, 52.3% female) between 12 and 20 ( $M = 15.19$ ;  $SD = 1.43$ ) years old. These data were collected with questionnaires among adolescents from eight higher general education and pre-university education high schools in the Netherlands. Adolescents’ volunteering was assessed with The Civic Prosocial Behavior Inventory (CPBI; van Goethem et al., 2012), a questionnaire which was developed and pilot-tested to map various aspects of adolescents’ volunteering. For the purpose of the current thesis, we focused on two aspects of volunteering: whether adolescents volunteered and how often they volunteered, the latter also referred to as their “volunteering involvement”. This is because it has been found that whether adolescents volunteer (at all) may be influenced by different factors and related to different processes than how often they perform volunteering activities (e.g., McGinley, Lipperman-Reda, Byrnes, & Carlo, 2010; Penner, 2002). Additionally, adolescents’ age and sex were assessed to examine their influence on the interrelations between adolescents’ volunteering, identity, and morality. As earlier research has suggested that sex and especially age may play an important role in these outcomes (cf. Eisenberg et al., 2005; Matsuba et al., 2007; van Hoof & Raaijmakers, 2002).

**Study 2.** In the second study, which is fully described in chapter 3, we examined the role of the volunteering by friends and parents, and the families’ civic orientation in adolescents’ volunteering. Adolescents’ parents and friends are considered important in socializing adolescents as they are part of the social environments in which adolescents spend most of their time and therefore have a direct impact on adolescents (also referred to as “the microsystem”, Bronfenbrenner, 1979). More specifically, parents are thought to play an important role in adolescents’ volunteering as they provide the first context for socialization and adult role models (cf. Caputo, 2009; Eisenberg, Fabes, & Spinrad, 2006). Friends are

considered important as they share the same interests, traits and social power (e.g., Cohen & Prinstein, 2006; Smetana, Campione-Barr, & Metzger, 2006).

Two of the most important ways by which parents and friends are thought to stimulate adolescents' volunteering are by "behavioral modeling" and by "value transmission" (Janoski, Musick, & Wilson, 1998). In the case of behavioral modeling, adolescents learn volunteering skills and behaviors by regularly experiencing and imitating the volunteering by others, and by comparing oneself with them. In the case of value transmission, adolescents start to volunteer because they adopt others' civic values or orientations, such as (the importance of) being involved in the local community or having regular discussions on political or civic issues (e.g., Janoski et al., 1998). Especially the civic orientation of adolescents' parents or family are considered important (for an overview, see Smetana et al., 2006; White & Matawie, 2004). There is also some indication that the extent to which adolescents adopt the civic orientation of their family and translate this orientation into civic behavior such as volunteering, may depend on whether this orientation is communicated in a positive and open way (cf. Rosenthal et al., 2010). To examine these assumptions on the role of friends, parents, and the families' civic orientation in adolescents' volunteering behavior, we used the same cross-sectional dataset as in study 1. Lastly, we also examined the influence of age on the role of these factors in adolescents' volunteering behavior as their (relative) contribution in this behavior may shift when adolescents become older (e.g., Law & Shek, 2009; McLellan & Youniss, 2003).

**Study 3.** In the third study, which is presented in *chapter 4*, we examined how and when adolescents' development in various domains is affected by volunteering, more specifically 'programmatic' volunteering. This involves volunteering activities that are organized for groups of adolescents regularly referred to as "community service" or "service learning". The difference between the latter two concepts is that service-learning often includes a reflection component, while organized reflection may or may not be a component of community service (Hart, Matsuba, & Atkins, 2008). In this thesis the term "community service" is used to describe the effects of programmatic volunteering as volunteering with and without a reflection component is examined.

Until now, four meta-analyses (Celio, Durlak, & Dymnicki, 2011; Conway, Amel, & Gerwien, 2009; Novak, Markey, & Allen, 2007; White, 2001) have provided support for the efficacy of community service. Their findings suggest that community service can stimulate adolescents' engagement in the civic domain, such as their volunteering. This is in accordance with the idea that adolescents have a great potential to become civically engaged when they are given the proper opportunities to do so (e.g., Harris et al., 2010). Further, there is some indication that community service stimulates adolescents' development and performance in additional domains: in the academic domain such as adolescents' school grades and school motivation, in the personal domain such as their identity development, and in the social domain such as their attitudes towards others and their moral development (Conway et al., 2009). However, although these meta-analyses suggest that community service benefits adolescents' behavior in

the proposed outcome domains, until now it is unclear whether community service actually influences this behavior. This is because earlier meta-analyses included studies with designs that do not permit causal inferences.

Another unresolved issue involves the conditions that optimize community service effects. In other words, assuming that community service has beneficial effects, it is currently unclear what characteristics of the community service cause or strengthen these effects. Further it is unclear whether adolescents' personal characteristics impact service effects.

One characteristic of community service that is thought to play a crucial role in community service benefits is *reflection* (e.g., Ogden & Claus, 2006). Through critical reflection, adolescents thoughtfully and intentionally perform and examine their community service experiences in light of particular learning objectives. As a consequence, reflection could further enable adolescents to learn and benefit from these service experiences (e.g., Billig, 2009; Hatcher, Bringle, & Muthiah, 2004). Although reflection is thought to be highly important, the actual role of reflection in community service effects is currently unclear. Furthermore, little is known on what kinds of reflection activities are beneficial. Some studies for example have proposed that the quantity of reflection is important; more frequent reflection would positively stimulate community service effects as it may help to process community service experiences more thoroughly (e.g., overview by Billig, 2009; Eyster, 2002). It is also suggested that the content of reflection, that is on what kind of community service experiences or issues adolescents reflect, may play an important role in the overall impact of community service (cf. Billig & Weah, 2008).

To determine the (causal) effects of community service on adolescents' development and examine the role of reflection and other characteristics in these effects (thus tackle both issues), we conducted a meta-analysis in which only studies ( $k = 49$ ;  $N = 24,477$ ) with a control group and a pre- and post-test (or a post-test only with randomized groups) were included. Using this data, we also analyzed whether and how community service effects were affected by reflection characteristics (e.g., the quantity and content of reflection), (other) community service characteristics (the quantity and kind of community service), and adolescents' characteristics (age and sex).

**Study 4.** In the fourth study, which is presented in chapter 5, we examined the role of reflection in community service effects on adolescents' volunteering, identity, morality, and the interrelations between these outcomes. First, we hypothesized that the community service experience as such (without structured reflection) may affect adolescents' volunteering, identity, and morality (e.g., Bekkers, Spengelink, Ooms, & Immerzeel, 2010, Crocetti, Jahromi, & Meeus, 2012; Furco, 2002). Community service experiences could for example stimulate adolescents' volunteering by positively affecting their civic attitudes. Performing community service can make adolescents feel more connected to society and can teach them the importance of being civically engaged (e.g., Kahne, Chi, & Middaugh, 2006). Further, community service may affect adolescents' identity development as adolescents learn about themselves through

for example the new behaviors and people they encounter during community service (e.g., Furco, 2002). It could also stimulate adolescents' moral development as adolescents may internalize the moral values that underlie performing community service (e.g., Metzger & Smetana, 2009). Another reason is that community service can confront adolescents with civic and moral values and issues in society, such as inequality or discrimination, which could increase their moral understanding and commitment to help others and fight inequality (e.g., Bowman, 2011; Lee, Olszewski-Kubilius, Donahue, & Weimholt, 2007; Raaijmakers & van Hoof, 2006).

Second, reflection may strengthen the effects of community service on adolescents' volunteering, identity, and morality. We hypothesized that reflection on civic, identity, and moral aspects or content of the community service experience and its wider context may be important. This is in accordance with the idea that the content of reflection plays an important role in service effects, and that more positive community service effects may be found when the content of the reflection activity matches the content of the outcome category (cf. Billig & Weah, 2008; Lemming, 2001; Waterman, 1997). "Civic reflection" for example involves thinking about the civic aspects of the service experience such as the importance of community service and being civically engaged (e.g., Kahne et al., 2006). "Identity reflection" for example involves thinking about one's behaviors, capacities, preferences, and learning experiences during community service (e.g., Ash, Clayton, & Atkinson, 2005). "Moral reflection" for example involves thinking about the moral values underlying adolescents' community service, and on moral issues that are connected to their community service such as inequality (for example when performing community service for others who are deprived of primary resources; e.g., Billig & Weah, 2008). Further, as adolescents' volunteering, morality, and identity are thought to be related, reflection on one of these contents (e.g., identity reflection) may not only affect one of these outcomes (e.g., identity), but may also (indirectly) affect the other outcomes (e.g., volunteering).

As mentioned before, although it is thought that reflection can strengthen community service effects, the *actual* importance of reflection in service effects is currently unclear. One of the main reasons for this unclarity is that, to our knowledge, no studies randomly allocated reflection to the community service (intervention). This prevents causal inferences on the role of reflection in service effects. In the fourth study, we examined the impact of reflection in community service effects directly by designing an intervention study in which three groups of adolescents were compared ( $N = 459$ ; 5.2 % female;  $M$  age = 15.70): adolescents who performed community service and were randomly assigned to (1) a reflection intervention ( $N = 172$ ) or to (2) no intervention ( $N = 159$ ), and (3) a control group ( $N = 66$ ). This way it could be determined which aspect of the community service intervention is responsible for the effects on adolescents' volunteering, identity, and morality we might find: the reflection, or (elements of) the community service, or both. In the reflection intervention group, adolescents reflected on the civic, identity, and moral aspects of the community service. For all groups the effect on their volunteering, identity, and morality were assessed with questionnaires before (pre-test) and after (post-test) adolescents in the community service

groups had finished their service.

Furthermore, we examined whether the effects of community service and reflection on adolescents' volunteering, identity, and morality were moderated by two other characteristics of the community service: the number of community service hours (the quantity of the community service) and the number of reflection assignments (the quantity of reflection) that were performed.

In *chapter 6*, the findings from all studies are summarized and conclusions are drawn on what they tell us with regard to how adolescents' volunteering can be explained by the examined personal and social factors and how community service (programmatic volunteering) affects adolescents' development, including identity and morality.







# 2

## **The Role of Adolescents' Morality and Identity in Volunteering Age and Gender Differences in a Process Model**

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## ABSTRACT

The aim of this study was to explain adolescents' volunteering in terms of their morality and identity and to examine the moderation effect of gender and age in this process. Data were collected among 698 Dutch adolescents aged 12 to 20 ( $M = 15.19$ ;  $SD = 1.43$ ). Adolescents' moral reasoning was positively associated with understanding moral issues and thinking about public responsibility towards these issues. In turn, moral understanding, along with being personally committed to act upon moral issues, were positively associated with identity. Extending the number of identity contexts tended to be related to being more likely to volunteer and to more volunteering involvement. Adolescents' identity integration was not related to how likely they were to volunteer, and was negatively related to their volunteering involvement. Clearer effects were found when differentiating between adolescent gender and age groups. Future research could examine this process over time, along with additional factors that may further explain adolescents' volunteering, and examine their age and gender specific effects.

## INTRODUCTION

In contrast to the common view that adolescents are increasingly disengaged from society and civic issues (e.g., Bennett, 2000; Cook, 2004; Harris, Wyn, & Younes, 2010), recent studies suggest that many adolescents do try to contribute to society. The ways by which they do this, however, have developed from mainly traditional forms, such as being a member of a political party or voting for elections (e.g., Zukin, Keeter, Andolina, Jenkins, & Delli Carpini, 2006), to also newer forms of engagement, such as signing petitions, demonstrating, boycotting products, and expressing one's opinions through new media such as interactive websites (e.g., Coleman & Rowe, 2005; Flanagan, Levine, & Settersten, 2009).

Adolescents' engagement is a topic of major public interest as it not only contributes to society, but also positively stimulates adolescents' own development. It promotes, for example, adolescents' life-satisfaction, self-rated health, self-esteem, educational and occupational achievement, sense of agency, social relatedness, and their moral-political awareness (e.g., Youniss & Yates, 1999; Wilson, 2000). As adolescents' engagement is considered important and is stimulated by the government, schools and educators, it is important to gain more insight into the factors associated with adolescents' engagement. Knowledge about these factors may provide tools to current initiatives stimulating adolescents' engagement.

In the current study we aim to explain adolescents' engagement, more particular various (traditional and new) forms of volunteering, by adolescents' morality and identity. Morality and identity are important, relatively stable predictors of concurrent and future volunteering (e.g., Grube & Piliavin, 2000; Matsuba, Hart, & Atkins, 2007; McLellan & Youniss, 2003). Although some theorists have described how morality and identity together can influence volunteering behavior (for an overview see Bergman, 2002), earlier empirical research has mainly focused on the relation between volunteering and morality or identity independently,

and has paid less attention to the interrelations between different aspects of morality and identity (e.g., Hardy, 2006; Matsuba et al., 2007; Pitt & Thoma, 2005). In the current study we will therefore focus on the processes by which different aspects of adolescents' morality and identity together explain adolescents' volunteering behavior. As age and gender differences have often been found for volunteering (e.g., Fabes, Carlo, Kupanoff, & Laible, 1999; Karniol, Grosz, & Schorr, 2003; Matsuba et al., 2007; Metz & Youniss, 2003; Wilson, 2000), we will also study the effects of age and gender on these processes.

### **Moral reasoning, moral thought and volunteering**

Over the last decades, research on the relation between morality and volunteering behavior has mainly emphasized the role of *moral reasoning* (Kohlberg & Candee, 1984; Walker, 2004). Moral reasoning can be defined as “a psychological construct that characterizes the process by which people determine that one course of action in a particular situation is morally right and another course of action is wrong” (Rest, Thoma, & Edwards, 1997). Moral reasoning is distinguished from other forms of reasoning, such as conventional reasoning (reasoning on relatively arbitrary rules and regulations that structure social interactions in social systems), as it concerns issues that inherently have consequence for other's welfare and rights (Yau & Smetana, 2003; Nucci, 1996). Kohlbergian theorists argue that moral reasoning as an inner psychological process, can give rise to outwardly observable behavior, such as volunteering (Rest, Narvaez, Bebeau, & Thoma, 1999). They argue that a higher level of moral reasoning leads to a stronger motivation to act accordingly to one's moral principles. Next to that it has been shown that volunteering can be experienced as a moral act as it directly affects the welfare of others (Metzger & Smetana, 2009). We therefore hypothesized that a higher level of moral reasoning could also be related to (being) more (inclined to show) volunteering behavior (e.g., Eisenberg, Carlo, Murphy, & van Court, 1995; Kohlberg & Candee, 1984). However, overall, only small to moderate relations have been found between moral reasoning and prosocial behaviors such as volunteering (e.g., Eisenberg, 1982; Eisenberg et al., 1995; Hardy, 2006).

Moral reasoning refers to the level of reasoning given a hypothetical moral dilemma concerning abstract categories (such as justice, duty, and rights; Narvaez, Getz, Rest, & Thoma, 1999). It may therefore not show direct, strong associations with specific real life (moral) behavior such as volunteering (cf. Higgins-D'Alessandro, 2008; Boom & Brugman, 2005). Moral theorists and researchers therefore argue that additional concepts are also important in volunteering (e.g., moral motivation; Rest, Narvaez, Bebeau, et al., 1999) or that intermediate (moral) concepts concerning actual issues instead of hypothetical dilemmas are more close to—and therefore more important for—adolescents' volunteering (e.g., Blasi, 1983, 1995; Narvaez et al., 1999).

One of these intermediate concepts is *general moral thought* (i.e. a body of thought) which represents thinking about and being committed to defend adolescents', moral rights issues (cf. Rest, Narvaez, Bebeau, et al., 1999), as for example defined in the Convention on the Rights of the Child (<http://www.20hchr.org/english/law/crc.htm>; Narvaez et al., 1999; Raaijmakers & van Hoof, 2006). Where moral reasoning refers to the level or stages of reasoning on hypothetical moral dilemmas about individual values (e.g., life and punishment; Colby et

al., 1987), general moral thought refers to a broad spectrum of high level issues on actual, internationally defined moral rights (civil, social, economic, political, and cultural rights; Boulware-Miller, 1985). As the focus of these moral rights issues is on children and adolescents, they actually affect adolescents' lives. From this perspective, they are less abstract and distant from adolescents' lives than Kohlbergian moral reasoning and therefore are possibly also more close to actual (volunteering) behavior.

In addition, in contrast to moral reasoning, general moral thought consists of not only two cognitive elements but also one motivational element. *Moral understanding* and *moral referral* are cognitive elements. Moral understanding is the extent to which one understands the content of moral rights issues, as well as agrees with these issues (having an understanding for these issues). Moral referral is the extent to which one is able to understand collective moral responsibility: How the public, the government, or people in general are responsible for the defence and continuation of moral rights issues (cf. Helwig, 1998; Rest, Narvaez, Bebeau, et al., 1999; Raaijmakers & van Hoof, 2006).

*Moral commitment* represents the motivational element of general moral thought. It refers to the extent to which one feels personally responsible for and committed to moral rights issues (cf. Blasi, 1983, 1995; moral motivation, Rest, Narvaez, Bebeau, et al., 1999; Raaijmakers & van Hoof, 2006). The fact that general moral thought contains both a cognitive as well as a motivational element, the latter being an important predictor of actual behavior (Chapman & Morley, 1999; Clary et al., 1998), may be an additional reason to expect that general moral thought is more close to volunteering than moral reasoning.

Research has shown that general moral thought is distinct from, but related to moral reasoning: Moral reasoning is positively related to the two cognitive elements of general moral thought (Derryberry & Thoma; 2005; Narvaez et al., 1999; Pitt & Thoma, 2005; Raaijmakers & van Hoof, 2006; Rest, Narvaez, Thoma, & Bebeau, 1999). General moral thought has shown to be an important predictor of engagement such as volunteering, especially in adolescence. In this period considering the needs of others becomes an increasingly important motive for social behavior and volunteering (e.g., Lies & Bock, 2008; Matsuba et al., 2007; Omoto & Snyder, 2002). We therefore hypothesize that the three components of general moral thought are important intermediate concepts in the process leading from moral reasoning to volunteering behavior: We expect that moral reasoning is positively related to the cognitive elements of general moral thought (i.e., moral understanding and moral referral) and that general moral thought, consisting of moral understanding, moral referral, and moral commitment, in turn is associated with volunteering.

### **Identity and volunteering**

Research on identity and volunteering in adolescence has mainly focused on volunteering as becoming part of and relating oneself with society. Adolescents participate in different societal contexts in which they can explore different roles, values and ideologies, which can contribute to becoming healthy members of society. Most adolescents participate in the

contexts of school, home and leisure. Others choose to participate in yet other contexts, such as volunteering (cf. Dornbusch, Herman, & Morley, 1996; van Hoof & Raaijmakers, 2002). Adolescents differ in the number of identity contexts in which they participate, but they also differ in the extent to which they consider each of these contexts to be important for their sense of identity (Kroger, 1988; Van Hoof, 1999).

Due to their participation in different societal contexts, adolescents develop a sense of self within each of these contexts (Erikson, 1968; Yates & Youniss, 1998; Youniss & Yates, 1999). However, adolescents not only develop context-specific identities but also integrate these different context-specific identities into an idea of being the same person over different contexts and over time: a sense of temporal-spatial continuity (Côté & Levine, 2002; Erikson, 1968; Kroger, 1993). This sense of temporal-spatial continuity, or *identity integration*, is an essential characteristic of adolescents' identity development (Côté & Levine, 2002; van Hoof, 1999; van Hoof & Raaijmakers, 2002).

The importance of a solid identity integration has been demonstrated: Adolescents who are better at integrating their context-specific identities, report a stronger sense of well-being (van Hoof & Raaijmakers, 2002). In addition, an integrated identity forms a solid basis for an extension of one's identity horizon: Research suggests that adolescents tend to participate in identity contexts outside their direct environment, (which are most often constructed by school, home, and leisure as identity contexts, van Hoof & Raaijmakers, 2002) when their identity integration is solid (van Hoof, 1997; van Hoof & Raaijmakers, 2002).

Adolescents' identity integration and their number of identity contexts are expected to be positively associated with each other: Adolescents who have a stronger identity integration are expected to be more likely to explore and extend their identity with contexts such as volunteering behavior (van Hoof, 1997; van Hoof & Raaijmakers, 2002). In the current study we will examine whether a more solid identity integration and having a larger number of personally important identity contexts are related to being more likely to volunteer.

### **The relationship between adolescents' volunteering, morality, and identity**

In previous research, the relations of morality and identity with volunteering have been mainly studied separately (e.g., Hardy, 2006; Matsuba et al., 2007; Pitt & Thoma, 2005). We however expect that different aspects of identity and of morality together can lead to adolescents' volunteering. We expect that a higher level of adolescents' moral reasoning may lead to further developed general moral thought, which involves both cognitively understanding real life moral issues (moral understanding) and considering what others can do about these issues (moral referral). In turn, this moral understanding and moral referral could make that adolescents see more opportunities for moral behavior such as volunteering.

Some theorists as well as previous empirical research, however, suggest that general moral thought would not directly lead to volunteering, but would lead to volunteering through the process of affecting or changing adolescents' identity (cf. Bergman, 2002; Blasi, 1983,

1995; Erikson, 1968; Hardy, 2006; Jennings, 1996; Youniss & Yates, 1999). Adolescents' moral understanding and moral referral could lead to stronger identity integration by stimulating adolescents' reflection on rules that structure the context-specific identities into a whole: the more structuring rules are applied, the more solid is the integration (van Hoof & Raaijmakers, 2003; cf. Erikson, 1968; Jennings, 1996). These rules could be mainly moral (placing context-specific identities into a wider societal and moral perspective; cf. Jennings, 1996) or mainly cognitive in nature (cf. Helwig, 1998; cognitive abstraction or organizational rules can help to further integrate one's identity, e.g., van Hoof en Raaijmakers, 2003).

More solid identity integration, in turn, forms a solid basis for choosing new ways to participate in society, such as choosing to volunteer. Next to that, adolescents' reflection on their responsibility and commitment to act upon these moral issues is likely to broaden adolescents' identity horizon to societal contexts which can involve volunteering (e.g., van Hoof & Raaijmakers, 2002).

We therefore hypothesize that adolescents' moral understanding and moral referral is related to volunteering by affecting their identity integration, and that adolescents' moral commitment is related to volunteering via the number of their personally relevant identity contexts.

### **The effects of age and gender in the process model**

Age has often been found to be associated with volunteering (e.g., Fabes et al., 1999; Matsuba et al., 2007; Metz & Youniss, 2003; Wilson, 2000), moral reasoning (e.g., Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005; Rest, 1979), general moral thought (cf. Helwig, 1998), identity integration, and the number of chosen identity contexts (e.g., van Hoof & Raaijmakers, 2002). If the model is able to describe the process of volunteering, then the process factors could partly mediate the relation between age and volunteering. Less is known on whether and how the interrelations between these variables would differ between adolescent age groups. We therefore also analyzed our model for younger (12 to 15 years old) versus older adolescents (16 to 20 years old).

Some studies suggest that girls are more involved in volunteering than boys (e.g., Karniol et al., 2003; Wilson, 2000). Compared to this mean gender difference, less is known on whether and how boys and girls would differ on their interrelations between morality, identity, and volunteering. We therefore also tested our model for differences between boys and girls.

## **METHOD**

### **Participants and procedure**

Data for our study came from 698 adolescents. Participants (47.7 % male, 52.3 % female) were between 12 and 20 ( $M = 15.19$ ;  $SD = 1.43$ ) years old, and came from eight higher general education and pre-university education high schools. 83.9 % of the participants were of Dutch origin, and 16.1 % were first or second generation immigrants: 8 % were Western immigrants

and 8 % were non-Western immigrants. In addition, 58.7 % were non-religious whereas 41.3 % indicated to be a member of church or religious community. Religious adolescents indicated to be Catholic (24 %), Protestant-Christian (10.2 %), Islamic (4.3 %), Hindu (0.9 %), or of another religious background (1.9 %). Most adolescents came from two-parent households (82.1%) and most adolescents had one or more siblings (90.4 %). Lastly, 33% of the adolescents indicated to have performed volunteering in the past year, which is in the range of volunteering rating in Dutch society (MOVISIE, 2011).

Schools were approached and asked to participate in our study. After permission was obtained, schools were given information letters for the parents of the adolescents. In accordance with local ethical guidelines, passive consent was provided by all participants. In each school class, data were collected with a digital questionnaire (Netquestionnaires, [www.netq.nl](http://www.netq.nl)) in two separate sessions of one school-hour (45-50 minutes). Each hour started with one or two trained examiner(s) personally assigning adolescents to the computers in the classroom to prevent friends from sitting next to each other. Participants were given a brief, standardized introduction and instruction. In this instruction adolescents were guaranteed confidentiality and were asked to answer all items of the questionnaire individually, without talking to their classmates.

### Measures

**Volunteering.** We used the Civic Prosocial Behavior Inventory (CPBI, van Goethem, 2009; available upon request from the first author), an adaption and combination of existing volunteering questionnaires (Andolina, Keeter, Zukin, & Jenkins, 2003; Bekkers & Boezeman, 2009; Carlo & Randall, 2002; Gaskin & Smith, 1997; Low, Butt, Ellis Paine, & Davis Smith, 2005; Youniss, Yates, & Sue, 1997). The CPBI (van Goethem, 2009) was used to assess whether adolescents volunteer. Among the adolescents who indicated to volunteer we also assessed: a) their volunteering involvement, b) the kind of volunteering organization they are involved in, c) their volunteering motivations, and d) adolescents' evaluation of their volunteering.

In the current study we only focused on that part of the CPBI (van Goethem, 2009) that assesses whether adolescents volunteered and adolescents' volunteering involvement (how often they volunteered). Adolescents indicated whether they had ever volunteered in an organization during the past year (yes = 1, no = 0;  $N = 232$  and  $N = 466$ , respectively). Organized volunteering work was defined as: activities within an organization, society, or club, which is intended to positively contribute to the environment, individuals, groups of people, or the society as a whole, without receiving money (small compensations are allowed). Adolescents who indicated to volunteer were also presented with a set of twenty-two traditional as well as new forms of volunteering activities, such as organizing an event, collecting money, domestic work, signing petitions, demonstrating, boycotting products, or administering the website of an organization. They reported whether, and if so, how often they had performed each of these activities for the organization they had been most active in on a scale that ranged from one to seven (1 = "not", 2 = "not, but maybe in the future", 3 = "among one to four times", 4 = "among five to ten times", 5 = "among once a month",

6 = "among once a week", 7 = "among several times a week"). If participants indicated that they were active in a second organization, they answered the same questions again for that organization. Adolescents' volunteering involvement score was calculated by recoding "not", and "not, but maybe in the future" into no involvement (= 0) and the other amounts of involvement from 1 to 5 (3 = 1, 4 = 2, 5 = 3, 6 = 4, 7 = 5). All separate activity scores for maximally two organizations were summed and then divided through the number of volunteering activities assessed (22) resulting in an average volunteering involvement score that could range from zero to five; with a higher score indicating a larger amount of time spent to volunteering work. In our sample, participants' mean score was .11 ( $SD = .25$ ), with a minimum score of 0 and a maximum score of 2.

**Moral Reasoning.** A Dutch translation of the short version of the Defining Issues Test (DIT; Rest, 1979) was used to assess the level of adolescents' moral reasoning. The DIT is regarded a valid and reliable measure of moral judgment (Thoma, 2002). The short version consists of three moral dilemmas. Adolescents were asked to read a dilemma and were asked what the main character should do. For each dilemma, adolescents were asked to rate and rank 10 statements in terms of importance in making their decision on the dilemma on a 5-point Likert scale (1 = unimportant to 5 = very important). Each of these statements is indicative of one of five stages of moral reasoning (stages 2 to 6; Kohlberg, 1969; Rest, 1979). Adolescents' answers were then used to calculate a N2 index score (for a detailed description of the computing procedure of the N2 index see Rest, Thoma, Narvaez, & Bebeau, 1997). This score represents the degree to which adolescents use postconventional moral reasoning (stage 5 and 6) compared to preconventional moral reasoning (stage 2 and 3), with a higher score indicating a higher level of moral reasoning. In the present study, Cronbach's alpha was .81.

**General Moral Thought.** The Children's Rights Evaluation Questionnaire (CREQ; van Hoof & Raaijmakers, 2010) was used to assess adolescents' general moral thought. We used five articles of the Convention on the Rights of the Child (<http://www2.ohchr.org/english/law/crc.htm>) representing the different categories of rights: civil, social, economic, political, and cultural rights (Boulware-Miller, 1985), and provision, protection, and participation rights (Lansdown, 1995). These articles were described in comprehensible language for adolescents. Article 14, for example, was described as: "Each child has the right to freedom of thought, conscience and religion, taking into account the responsibility of parents and the laws of the countries." Adolescents were asked to evaluate each of the five articles by scoring each article on eight 9-point scales: (1) difficult-easy to understand, (2) difficult-easy for governments to apply, (3) does-not make people responsible for each other (reversed scale), (4) political parties can-not do much to enforce this article (reversed scale), (5) it is-it is not about me, as a person (reversed scale), (6) I can do a great deal-very little for this article to be respected/observed (reversed scale), (7) I don't agree-I agree with every aspect of this article, and (8) I am-I am not, together with others, willing to make an effort to defend this article (reversed scale; cf. Doise, Spini, Jesuino, Ng, & Emler, 1994; Raaijmakers & van Hoof, 2006). Factor analysis showed that these eight questions represented three factors: (1) moral understanding:  $\alpha = .88$  (question 1 and 7); (2) moral referral:  $\alpha = .75$  (question 2, 3 and 4);

(3) moral commitment:  $\alpha = .87$  (question 5, 6, and 8). These factors were transformed to three corresponding, latent variables in our model. Due to the large number of questions (10 to 15 questions for each factor), we randomly assigned these questions to one of three parcels for each of the latent factors, with each parcel containing among an equal number of items (Little, Cunningham, Shahar, & Widaman, 2002). The factor loadings of these parcels ranged from .67 to .87 and this latent factor solution fitted the data satisfactorily (CFI = .97, RMSEA = .08).

**Personal Identity: identity contexts and identity integration.** Adolescents' identity was measured with the Spatial Continuity of Identity Questionnaire (SCIQ; van Hoof & Raaijmakers, 2002), which has shown to be a valid measure of identity. First, adolescents were asked to evaluate 20 items, representing four identity dimensions which are often explicitly or implicitly measured in former identity status research (see also van Hoof, 1997): Competence (four items referring to individual abilities, e.g., "I make a decision easily"), Inhibition (six items representing self-doubt that has a paralyzing effect, e.g., "I am insecure"), Feeling (four items, e.g., "I am lonely"), and Interpersonal Behavior (six items representing how individuals relate to, or act toward, their social environment, e.g., "I am bossy"). These items were evaluated on a seven-point scale ranging from "I am totally not like that" to "I am totally like that".

Second, the number and content of adolescents' context-specific identity were assessed. The number of adolescents' identity contexts was assessed by providing adolescents with seven identity contexts, from which they could choose all their personally revealing identity contexts. These seven contexts, adjusted to the adolescents' way of life (and often used as identity contexts in former identity research; van Hoof, 1997), were: school, home, own home (defined as living independently from the parents), leisure time, work, religion, and politics (defined as being active in for instance Amnesty International or in a students' board).

Then the content of their context-specific identities was assessed by asking them to evaluate the same 20 items for each of their three most personally revealing identity contexts. Each adolescent's *identity integration* was determined by calculating the correlations between each adolescent's general description of identity and each of their three context-specific identities. The mean of these correlations represents their level of identity integration, with a higher score representing a more integrated identity.<sup>1</sup>

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<sup>1</sup> Referred to as "vertical identity integration" in the article of van Hoof & Raaijmakers (2002). In the latter article, vertical identity integration is distinguished from 'horizontal identity integration', which is an alternative method to determine identity integration (horizontal identity integration is the average of the correlation between adolescents' context specific identities), but they are highly related concepts (in our study:  $r = .82, p < .01$ ).

As participants did not consciously relate their context specific identity-descriptions to their general identity-description, our measure of identity integration differs from related concepts such as self-unity and self-continuity (e.g., Proulx & Chandler, 2009), that (mainly) rely on conscious self-reports of identity integration.

## Analyses

The hypothesized relations between age, moral reasoning, moral development, identity and volunteering of our process model were studied with Structural equation modeling (SEM) using Mplus (Version 6; Muthén & Muthén, 1998-2010). We used zero inflated poisson regression to account for the large number of zero-scores (non-volunteers) in our volunteering measure by combining a point mass at zero with a proper count distribution (for a detailed description of zero inflated poisson regression see Lambert, 1992). It combines predicting the inflated binary volunteering variable (not volunteering = 0 and volunteering = 1) with a regression predicting the value of the count dependent variable (the involvement in volunteering for adolescents who volunteered). To prevent problems of non-convergence due to divergent values of variances, we divided participants' moral reasoning scores by 100 before using them in our analyses. The percentages of missing data for the variables in our model varied between 1% (age) to 16.3% (general moral thought). Monte Carlo integration with robust maximum likelihood estimation (MLR) was used to estimate missing data, and to calculate the bias-corrected standard errors and confidence interval (Muthén & Muthén, 1998-2010). For the calculation of the correlations between the variables in our model, we used the average scores on each of the three factors of general moral thought. For the remaining analyses we used these factors as latent variables.

Multi-group analyses within Mplus were used to analyze the moderation effect of age and gender. Improvement in model fit was tested with the Satorra-Bentler  $\Delta\chi^2$ -difference test (Satorra & Bentler, 2001). Indirect effects were calculated using Aroian's version of the Sobel test (Muthen & Muthen, 1998-2010). Initially, we also controlled for adolescents' cultural origin (belonging to an ethnic minority or not) and religion in our model. However, as neither cultural origin nor religion changed the estimates of the model, we did not include these control variables in our final model for reasons of parsimony.

## Preliminary results

Means and correlations between the variables of our process model are presented in Table 1. Adolescents' age was related to all variables except for moral commitment and identity integration. Moral reasoning was related to the two cognitive elements of general moral thought (moral referral and moral understanding) and to identity integration. In turn, these two aspects of adolescents' general moral thought were positively related to each other and to identity integration. Adolescents' moral commitment was positively related to moral referral and the number of their identity contexts. In turn, moral understanding and the number of identity contexts were positively related to whether adolescents volunteered. The number of identity contexts was also positively related to adolescents' identity integration and to their volunteering involvement. Lastly, adolescents' identity integration was negatively related to their volunteering involvement and was not related to whether adolescents volunteered.

Table 1  
Means and correlations between the variables within the process model

|                             | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8   | Volunteering |      |       |       |       |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-----|--------------|------|-------|-------|-------|
|                             |       |       |       |       |       |       |       |     | 0            |      | 1     |       |       |
|                             |       |       |       |       |       |       |       |     | M            | SD   | M     | SD    | ptiff |
| 1. Age                      |       |       |       |       |       |       |       |     | 15.03        | 1.38 | 15.50 | 1.43  | <.01  |
| 2. Moral reasoning          | .18** |       |       |       |       |       |       |     | 2.45         | 1.42 | 2.58  | 1.49  | .26   |
| 3. Moral commitment         | .06   | .04   |       |       |       |       |       |     | 4.93         | 1.39 | 4.98  | 1.16  | .67   |
| 4. Moral referral           | .11** | .15** | .48** |       |       |       |       |     | 5.69         | 1.41 | 5.76  | 1.48  | .60   |
| 5. Moral understanding      | .19** | .17** | -.04  | .20** |       |       |       |     | 6.27         | 1.35 | 6.57  | 1.35* | <.05  |
| 6. Identity contexts        | .13** | -.02  | .11** | .06   | .01   |       |       |     | 2.83         | 1.10 | 3.04  | 1.13* | <.05  |
| 7. Identity integration     | .00   | .13** | .05   | .13** | .32** | .17** |       |     | .69          | .23  | .69   | .24   | .63   |
| 8. Volunteering involvement | .12** | .01   | .02   | -.02  | -.05  | .09*  | -.10* |     |              |      |       |       |       |
| M                           | 15.19 | 2.49  | 4.95  | 5.71  | 6.38  | 2.91  | .69   | .11 |              |      |       |       |       |
| SD                          | 1.43  | 1.43  | 1.31  | 1.43  | 1.35  | 1.12  | .23   | .25 |              |      |       |       |       |

Note. For the dichotomous aspect of volunteering in our model, the average scores on the variables in our model for adolescents who did not volunteer (0) and for adolescents who volunteered (1) are presented; ptiff = significance of the difference between the mean scores for adolescents who did not volunteer (0) and who volunteered (1). For those adolescents who volunteered (1), correlations between volunteering involvement and the other variables within our model are also presented.

\*\*  $p < .01$ . \*  $p < .05$ .

## RESULTS

The estimated model is depicted in Figure 1. The relative model fit was:  $\ln L: -12221.59$  (number of freely estimated parameters = 53;  $c = 2.17$ ). With increasing age, adolescents were more likely to volunteer, but, if they did, were not more involved in volunteering work. As expected, age was also positively related to the level of moral reasoning, which in turn was positively related to the cognitive elements of general moral thought (moral understanding and moral referral). Two of the three factors of general moral thought were positively related to one another: Moral referral was positively related to moral commitment ( $r = .49$ ;  $p < .01$ ), and to moral understanding ( $r = .48$ ;  $p < .01$ ), but moral commitment was not related to moral understanding ( $r = -.07$ ,  $p = .26$ ). Also, two of three elements of general moral thought were related to adolescents' identity: A higher level of moral understanding was related to a further integrated identity, and a higher level of moral commitment was related to higher number of personally relevant identity contexts. However, adolescents' moral referral was unrelated to their identity integration. The two aspects of adolescents' identity were positively related to each other ( $r = .18$ ;  $p < .01$ ). We also found a marginally significant, positive association between adolescents' identity contexts and volunteering: A higher number of personally relevant identity contexts was related to being more likely to volunteer and to more volunteering involvement. Yet, adolescents' identity integration was not related to how likely they were to volunteer and was negatively related to their volunteering involvement. Lastly, except for an indirect effect of moral understanding on adolescents' volunteering involvement (indirect  $b = -.08$ ,  $p < .01$ ), no indirect effects of adolescents' morality were found on volunteering.

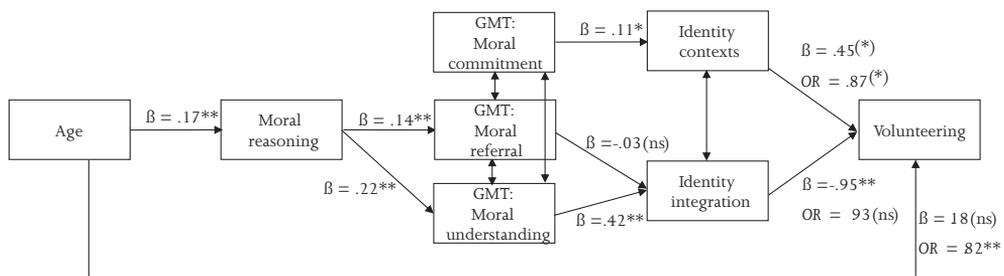


Figure 1. Parameter estimates ( $\beta$ 's) for the variables within the process model: of age, moral reasoning, general moral thought (GMT), and identity to volunteering. For the paths from identity to volunteering, the first value is the parameter estimate for volunteering involvement. The second value is the parameter estimate for the binary aspect of volunteering (whether adolescents volunteered = volunteering 0-1), which are odds ratios (OR), instead of  $\beta$ 's. Odds ratio estimates between 0 and 1 represent an increase in the chance of having performed volunteering in the past year, and estimates above 1 represent a decrease in the chance of having performed volunteering in the past year.

Ns = non-significant. <sup>(\*)</sup> $p > 0.01$ .  $*$   $p < 0.05$ .  $**$   $p < 0.01$ .

### Age differences

A multi-group analysis with age as grouping variable revealed a better model fit for the model in which parameters were freely estimated than for the model in which parameters were constrained to be equal for both age groups (Satorra-Bentler corrected  $\Delta\chi^2(27) = 71.42$ ,  $p < .01$ ). Statistically significant age differences in estimates are presented in Table 2. We found age differences for the association between identity and volunteering. First of all, we found that the negative association between identity integration and volunteering involvement applied to younger but not older adolescents. Consequently, the indirect effect of moral understanding on volunteering via identity integration, was only significant for younger adolescents ( $b = -.11$ ,  $p < .01$ ). No differences were found for identity integration and whether they volunteered. Next to that, we found that a larger number of personally relevant identity contexts was associated with more volunteering involvement for younger adolescents and with being more likely to volunteering among older adolescents.

### Gender differences

A multi-group analysis with gender as grouping variable revealed a better model fit for the model in which parameters were freely estimated than for the model in which parameters were constrained to be equal for both groups (Satorra-Bentler corrected  $\Delta\chi^2(32) = 70.91$ ,  $p < .01$ ). Statistically significant gender differences in path estimates are presented in Table 2. No differences were found between boys and girls, except for the relation between moral referral and identity integration (which were both non-significant relations), and for the relation between identity integration and volunteering involvement. A gender difference appeared in the relation between identity integration and whether they volunteered, though this relationship did not reach statistical significance for either boys ( $p = .17$ ) or girls ( $p = .14$ ). Next to that we found a stronger, negative association between identity integration and volunteering involvement for boys than for girls (respectively,  $b = -1.54$ ,  $p < .01$ ;  $b = -.62$ ,  $p = .17$ ). Consequently, the indirect effect of moral understanding on volunteering via identity integration, was only significant for boys and not for girls ( $b = -.13$ ,  $p < .01$ ).

Table 2  
Age and gender differences between the paths of the process model

|  | Age         |      |      |             |     |       |       |
|--|-------------|------|------|-------------|-----|-------|-------|
|  | Young       |      |      | Old         |     |       |       |
|  | b (OR)      | SE   | B    | b (OR)      | SE  | B     |       |
| Moral referral - Identity integration        | 0           | .02  | -.02 | 0           | .02 | -.01  | -     |
| Identity integration - Volunteer 0-1         | .06 (1.06)  | -.16 | .01  | -.16 (.85)  | .56 | -.02  | -     |
| Identity integration - Volunteer involvement | -1.44**     | .23  | -.90 | -.52        | .50 | -1.03 | <.01  |
| Identity contexts - Volunteer 0-1            | -.03 (.97)  | .10  | -.02 | -.25* (.78) | .11 | -.15  | <.05  |
| Identity contexts - Volunteer involvement    | .20*        | .10  | .55  | .02         | .07 | .18   | <.05  |
|  | Gender      |      |      |             |     |       |       |
|  | Boys        |      |      | Girls       |     |       |       |
|  | b (OR)      | SE   | B    | b (OR)      | SE  | B     | pdiff |
| Moral referral - Identity integration        | .02         | .02  | .07  | -.03        | .02 | -.12  | <.01  |
| Identity integration - Volunteer 0-1         | .69 (1.99)  | .50  | .10  | -.88 (.41)  | .59 | -.11  | <.01  |
| Identity integration - Volunteer involvement | -1.54**     | .27  | -.97 | -.62        | .45 | -.82  | <.01  |
| Identity contexts - Volunteer 0-1            | -.14 (0.87) | .10  | -.09 | -.14 (0.87) | .11 | -.08  | -     |
| Identity contexts - Volunteer involvement    | .11         | .07  | .34  | .11         | .09 | .66   | -     |

Note. Only the paths that showed age or gender differences are presented ( $p < .05$ ). Young = adolescents of 12 to 15 years old; Old = adolescents of 16 to 19 years old. For the logistic regression part of the model (paths to whether adolescents volunteered = volunteering 0-1), B's are logits. These logits are inverted to odds ratios (OR), which are presented between brackets. Odds ratio's between 0 and 1 represent an increase in the chance of having performed volunteering in the past year, and estimates above 1 represent a decrease in the chance of having performed volunteering in the past year.

\*  $p < .05$ ; \*\*  $p < .01$ . *pdiff* = statistical significance of the age and gender differences.

## DISCUSSION

In this study we examined the process by which various aspects of morality and identity are related to volunteering. As expected, we found that adolescents' moral reasoning was positively related to their general moral thought, which, in turn, was related to a further developed identity. For the relation between adolescents' identity and volunteering, clearest effects were found when differentiating between adolescent gender and age groups.

### **The relationship between adolescents' morality and identity**

We found that a higher level of *moral reasoning* was positively associated with the cognitive elements of adolescents' general moral thought: It was related to a better understanding for actual, real-life moral issues (*moral understanding*) and to being more able to think about the collective, moral responsibility for these issues (*moral referral*; Derryberry & Thoma; 2005; Narvaez et al., 1999; Pitt & Thoma, 2005; Rest, Narvaez, Thoma et al., 1999).

In turn, two of the three elements of general moral thought were related to adolescents' identity development. First of all, a further developed moral understanding was related to more solid *identity integration* (cf. Erikson, 1968; Jennings, 1996; van Hoof & Raaijmakers, 2003). This suggests that having a better understanding of moral rights issues, which apply to all people, can provide adolescents with an overarching perspective or rules that can help to structure their personally relevant contexts-specific identities in an integrated whole. Future research could examine whether this overarching perspective is more moral (cf. Hofer, 1999; Jennings, 1996; Yates & Youniss, 1996) or rather cognitive in nature (cf. Helwig, 1998; van Hoof & Raaijmakers, 2003).

Moral referral, on the other hand, was not related to adolescents' identity integration. It could be that, as adolescents have a limited amount of political rights and obligations (e.g., hardly any adolescent in our study had the right to vote in national or regional elections), governmental or public responsibility is no important guiding principle for their identity development yet (cf. Torney-Purta & Amadeo, 2003; van Hoof & Raaijmakers, 2002). Alternatively, the lesser importance of collective moral responsibility to adolescents' identity may be specific to Dutch society or to European societies (e.g., compared to USA society; cf. Torney-Purta, 2002; Torney-Purta & Amadeo, 2003).

The motivational element of general moral thought, *moral commitment*, was positively related to the number of adolescents' *identity contexts* (cf. van Hoof & Raaijmakers, 2002). This suggests that when adolescents feel more committed to a broader societal, moral perspective, they are also more likely to feel at home in a broader range of these societal contexts (i.e. a broadening of the identity horizon; e.g., van Hoof & Raaijmakers, 2002).

### **The relationship between adolescents' identity and volunteering**

Some indications were also found for a relation between adolescents' identity development and volunteering behavior. First, when adolescents extended the number of their identity

contexts, they tended to be more likely to volunteer and, when they volunteered, they tended to perform volunteering activities more frequently (i.e. more volunteering involvement).

Second, adolescents' identity integration predicted their volunteering involvement but not how likely they were to volunteer. What initially seemed even more surprising was that adolescents' identity integration was not positively but negatively related to their volunteering involvement, which means that there was less cohesion between adolescents' context-specific identities when they volunteered more often.

Lastly, all findings on the relation between identity and volunteering became clearer when age and gender differences were considered, which will be discussed in the section on the moderation effects of age and gender on our process model.

### **The relationship between adolescents' age and our process model**

We found that with age, adolescents developed a higher level of moral reasoning (cf. Eisenberg et al., 2005; e.g., Rest, 1979) and adolescents were more likely to volunteer (e.g., Metz & Youniss, 2003). However, when they did volunteer, they were not more involved in volunteering activities than younger adolescents (e.g., Cheung, 2006). This suggests that although age plays a role in starting volunteering work, other factors are important in predicting how often adolescents will perform volunteering activities. Next to that, we did not find any indirect effects of age on volunteering, which suggests that our process model does not mediate this (linear) relation. Rather, our model could be age specific, as an indirect effect of moral reasoning on volunteering involvement was found for younger but not older adolescents.

### **Moderation effects of age and gender differences on our process model**

As mentioned before, the relations within our model became clearer when gender and age differences were considered. We found that age and gender differences were mainly present in the relation between adolescents' identity development and volunteering.

**Age differences.** Age differences show that the negative relation between adolescents' identity integration and volunteering involvement only applied to younger adolescents. Next to that we found that for younger adolescents, a higher number of personally relevant identity contexts was related to being more involved in volunteering activities (and not to being more likely to volunteer), whereas for older adolescents we found that a higher number of these identity contexts was related to being more likely to volunteer (and not to how involved they were when they volunteered). An additional finding was that, for younger adolescents, the relation between their level of moral reasoning and their volunteering was mediated by their moral understanding and by their identity integration.

Overall these findings suggest that younger and older adolescents differ on how the broadening of their identity horizon is related to their volunteering behavior: Whereas older adolescents start new activities when they broaden their identity horizon, this does not mean they will

also (immediately) invest a lot of time and energy in these new activities. Possibly this may be due to older adolescents' former experiences on what consequences a large investment in a new activity or identity context can have on themselves, such as on their well-being (lower identity integration due to fragmentation of one's context-specific identities has shown to be negatively related to adolescents' well-being; van Hoof & Raaijmakers, 2002). Younger adolescents, on the other hand, may lack this experience. Therefore, the enthusiasm often associated with new experiences and environments may make them invest more time in these new contexts and activities, such as volunteering, when they broaden their identity horizon.

This may also explain why younger but not older adolescents' identity integration is negatively related to their volunteering involvement: It could be that whereas older adolescents do not experience a negative effect of being more involved in volunteering, the lack of experience in younger adolescents may cause that a larger time investment in volunteering leads to an imbalance in the integration of all personally relevant context-specific identities. For example, because a large investment in one context (e.g., volunteering) might also alter the content and relative importance of other identity contexts. In turn, this could negatively affect the cohesion between all personally relevant context-specific identities (e.g., van Hoof, 1997).

Alternatively or additionally, it could be the case that younger adolescents' identity integration is negatively related to their volunteering involvement, because for this group of adolescents more than for older adolescents, volunteering is a matter of identity exploration. This means that new identity contexts and activities adolescents encounter, such as volunteering, may become part of who they are, but are still relatively instable (i.e. not central to their identity; e.g., they can stop doing these activities or stop finding them personally relevant; cf. Hofer, 1999; i.e. Klimstra, Hale, Raaijmakers, Branje, & Meeus, 2010) and therefore not yet integrated into their identity. This explanation suggests that not only assessing adolescents' personally relevant context-specific identities, but also assessing the extent to which these identities are personally relevant (how central these identities are to them), could be important and could provide a valuable addition in explaining the relation between identity and volunteering.

Lastly, due to the cross-sectional nature of our study, these explanations should be considered with some caution. To be able to make any strong inferences on the direction or causality of the age-specific relation between identity and volunteering, future longitudinal research is required.

**Gender differences.** Gender differences show that the negative relation between adolescents' identity integration and volunteering involvement mainly applied to boys. We also found that for boys, the relation between adolescents' moral understanding and volunteering was partly mediated by their identity integration.

Similar arguments proposed to explain age differences for the relation between identity and volunteering may apply to explain these gender differences: Perhaps boys experience volunteering more often as something to explore than girls (cf. Klimstra et al., 2010). First,

this may be because volunteering may already be more part of girls' than of boys' identity. Former research has shown that girls volunteer more often in the company of friends and seek peer-approval by volunteering, in which case the volunteering behavior could become part of who they are among their friends and peers. In contrast, boys seek out their own volunteering opportunities more often, in which case volunteering may be considered as a new identity context or experience (cf. Sundeen & Raskoff, 1995; Wuthnow, 1995).

Second, it could be that the kind of volunteering activities girls perform are already more part of their identity than the volunteering activities boys perform. For example, women and girls are more likely to be involved in volunteering in which caring is an important element, such as community, welfare, and educational volunteering (e.g., visiting the elderly at nursing homes; Dolnicar & Randle, 2007; Hofer, 1999; McLellan & Youniss, 2003). This volunteering behavior may be already part of girls' identity due to their gender-stereotypic role as being caring individuals (cf. Hofer, 1999; Metzger & Smetana, 2009; Walker, 2000, 2002; Wilson, 2000). In contrast boys, like men, could be more involved in activities within sporting or recreational organizations (cf. Dolnicar & Randle, 2007). In this case, although sports or recreation may already be part of who they are, volunteering within these organizations may not already be an aspect of boys' identity (cf. Metzger & Smetana, 2009). Consequently, it could also be the case that when volunteering eventually becomes part of boys' identity, their identity integration may suffer more from this volunteering involvement than girls' identity integration.

### **Strengths, limitations, and implications of our study**

Because this study is one of the first to examine gender and age differences for the relation between adolescents' identity and volunteering, all of these explanations are tentative. As mentioned before, although our results suggest that volunteering and identity may mutually influence each other over time (Flanagan, Bowes, Jonsson, Csapo, & Sheblanova, 1998; Youniss, McLellan, & Yates, 1997), the correlational and cross-sectional design of our study ultimately does not allow conclusions about development or causal links within our process model. Therefore more studies with longitudinal and (quasi) experimental designs are needed to examine the interconnections of identity and volunteering, but also morality, identity, and volunteering, and their mutual relationship over time.

Second, our model focused on a selection of important intrapersonal characteristics to explain adolescents' volunteering. Future research could include additional person characteristics as predictors, such as personality (e.g., Atkins, Hart, & Donnelly, 2005), but also additional aspects of volunteering that apply to both volunteers and non-volunteers, such as future volunteering motivations (Chapman & Morley, 1999). In addition, it would also be interesting to extend our person-oriented model with important environmental predictors, to examine the relative importance of internal in relation to external processes preceding adolescents' volunteering, and to examine the gender and age specific effects of these processes. For example, research has shown that being member of an organization (e.g., Atkins et al., 2005), service-learning at school, and (volunteering by) parents, siblings, and peers (e.g., Andolina, Jenkins, Zukin, &

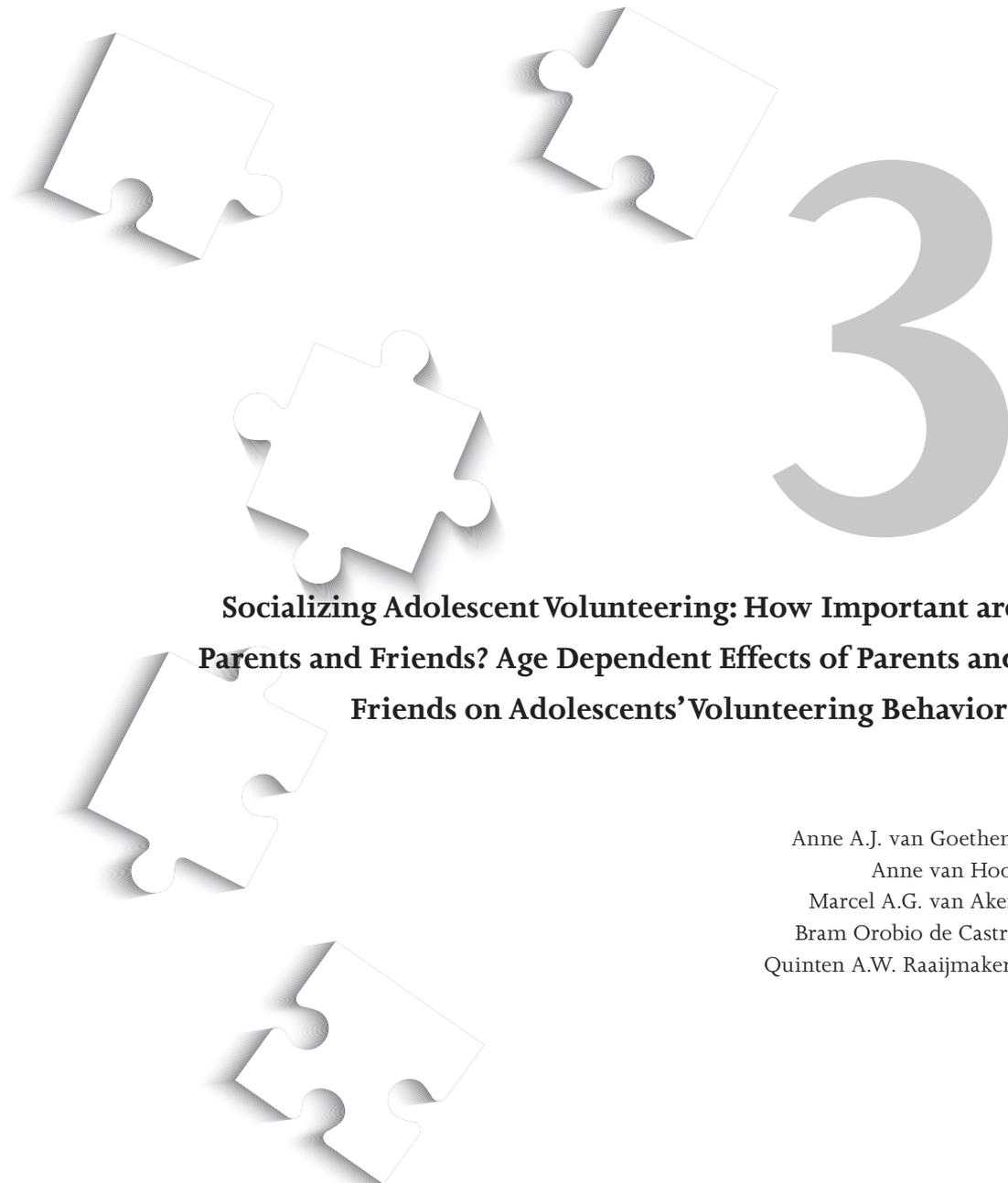
Keeter, 2003; McLellan & Youniss, 2003; Smetana & Metzger, 2005) are important precursors of adolescents' volunteering.

One of the strengths of this study is that by using the CPBI (van Goethem, 2009) to measure volunteering, we were able to not only explain how likely adolescents were to volunteer, but also, when they did volunteer, how much adolescents were involved in volunteering activities. Next to that, previous research has shown that adolescents often have misconceptions of what is considered to be volunteering (Andolina, Keeter et al., 2003) and, because of that, often not recognize their activities as volunteering activities. We have tried to avoid this misconception in our instrument for volunteering (CPBI; van Goethem, 2009), by providing adolescents with a clear definition of volunteering and by presenting specific volunteering activities to the adolescents.

This study also moved beyond single-variable theories by incorporating various interdependent aspects of adolescents' morality and identity to explain their volunteering in a comprehensive person-focused process model. We found that adolescents' volunteering behavior does not depend (only) on their moral reasoning. What is also important, is applying this moral reasoning to thinking about real life moral rights issues, and incorporating this thinking together with a sense of moral commitment into an extending identity horizon. For boys and younger adolescents, their identity integration is also an important meditational factor in explaining their volunteering.

This knowledge may provide extra tools to current initiatives in stimulating adolescents' civic participation. It suggests that adolescents' volunteering may increase when their morality and identity development is stimulated. For example, lessons in high school service learning programs could focus more on stimulating students to become more aware of real life moral issues and to reflect on their own responsibility and role within these issues. In addition, our study shows that this process preceding volunteering may be different for boys and girls, and for younger and older adolescents. This could mean that current initiatives could be more effective in stimulating volunteering when attenuated to these gender-, and age differences.





# 3

**Socializing Adolescent Volunteering: How Important are  
Parents and Friends? Age Dependent Effects of Parents and  
Friends on Adolescents' Volunteering Behaviors**

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## ABSTRACT

This study examined the relative importance of best friend's and parents' volunteering and civic family orientation (combined with open family communication) in adolescents' volunteering, and the moderating effect of age. Results, involving 698 adolescents ( $M$  age = 15.19;  $SD$  = 1.43), revealed that adolescents were more likely to volunteer when their best friend and parents volunteered, and were more involved in volunteering when their family had a stronger civic orientation combined with more open family communication. Clear age differences were found: when adolescents get older, friends become more important for whether they volunteer, and the family's civic orientation becomes important for their volunteering involvement. An implication of these findings may be that, depending on adolescents' age and the aspect of volunteering, interventions may focus on targeting parents' or friends' civic behavior to stimulate adolescents' volunteering.

## INTRODUCTION

Adolescence is a central period for prosocial development which is characterized by increased emotional responsiveness, a growing awareness and concern for the needs and interests of others, and increased levels of prosocial and civic behavior (e.g. Dovidio, Piliavin, Schroeder, & Penner, 2006; for an overview, see Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005). One important example of these prosocial and civic behaviors is adolescents' volunteering. Volunteering is not only part of adolescents' prosocial development but, in turn, also stimulates this development and has positive effects on other aspects of adolescents' lives such as their life-satisfaction, self-rated health, and academic and occupational achievement (e.g., Youniss & Yates, 1999; Wilson, 2000).

As volunteering behavior increases during adolescence and has positive effects on adolescents' development, the promotion and socialization of adolescents' volunteering is a topic of major interest and concern. Two of the most important socializing agents who influence adolescents' volunteering development are parents and friends. Parents are important as they provide the first context for socialization and adult role models (cf. Caputo, 2009; Eisenberg, Fabes, & Spinrad, 2006), and friends are important as they share the same interests, traits, and social power (e.g., Cohen & Prinstein, 2006; Smetana, Campione-Barr, & Metzger, 2006).

In the current study we focus on parents' and friends' influence on two aspects of volunteering: whether adolescents volunteer or not and, if adolescents volunteer, how often they volunteer. The latter also being referred to as adolescents' "volunteering involvement" (e.g., Andolina, Jenkins, Zukin, & Keeter, 2003; McGinley, Lipperman-Reda, Byrnes, & Carlo, 2010). These two aspects of volunteering may be qualitatively different also because research suggests that they are related to different internal psychological processes (e.g., van Goethem et al., 2012), as well as external processes and influences (e.g., McGinley et al., 2010). In accordance with this idea, indication has been found that parents and friends could influence volunteering behaviors in different ways (e.g., Janoski, Musick, & Wilson, 1998; Law & Shek, 2009; McGinley et al.,

2010). Janoski and colleagues (1998) theorized that two of the most important ways by which adolescents' volunteering is stimulated, is by social practice or "behavioral modeling" and by "value transmission".

In our study we therefore examine the extent to which parents and friends affect adolescents' volunteering through behavioral modeling. In addition, we study the influence of parents' value transmission. Further, in contrast to most research in this field which has been conducted in the USA, we examined these practices in the Netherlands. This provides an opportunity to examine the generalizability of these volunteering socialization practices.

In the following sections, the concepts of behavioral modeling and value transmission will be further explained. After that, we will discuss why and how these practices may have a different impact on younger compared to older adolescents.

### **Behavioral modeling: the relation between parents' and friends' volunteering and adolescents' volunteering**

In case of behavioral modeling, the desired social skills and behaviors are learned by habituation, social comparison, and regular practice within stable situations and social relationships (cf. Janoski et al., 1998; Janoski 1995). Translated to the socialization of volunteering, this would mean that adolescents are stimulated to volunteer because they routinely encounter the volunteering by their parents and friends.

In accordance with this behavioral modeling perspective, there is a relatively large volume of published studies showing that whether one or both parents volunteer is one of the best predictors of whether adolescents will volunteer (e.g., Andolina et al., 2003; Metz, Mclellan, & Youniss, 2003; Metz & Youniss, 2003), and of how involved adolescents are in volunteering (e.g., McGinley et al., 2010; Smetana & Metzger, 2005). Two recent studies, conducted in an American sample (Andolina et al., 2003) and a Dutch sample (Bekkers, 2007), found that volunteering is even transmitted from parents to their children while controlling for family background variables such as the level of education and religion. This seems to suggest that actual modeling of the volunteering behavior takes place.

In contrast to the relatively large amount of evidence showing that volunteering by parents predicts volunteering by their adolescent children, until now relatively little is known about the effects of volunteering by friends on adolescents' volunteering. The few available studies however do suggest that adolescents are more likely to volunteer when their friends also volunteer (Clary et al., 1998; Okun & Schultz, 2002), especially when the volunteering is performed by close friends (Barry & Wentzel, 2006; Mclellan & Youniss, 2003). The current study extends this research by investigating the influence of parents' and best friends' volunteering on both whether adolescents volunteer and how involved adolescents are in their volunteering activities.

### **Value transmission: the role of open family communication in the relation between civic family orientation and adolescents' volunteering**

In addition to behavioral modeling, past research has indicated that value transmission, passing on core beliefs about how one ought to think or behave (Flanagan, Bowes, Jonsson, Csapo, & Sheblanova, 1998), can have an important impact on adolescents' civic values and engagement such as volunteering. This is true for American samples (cf. Hart & Fegley, 1995; Janoski et al., 1998; Pratt, Hunsberger, Pancer, & Alisat, 2003) as well as non-American samples (e.g., Chinese sample; Law & Check, 2009).

Especially civic values or attitudes and civic engagement, together referred to as "civic orientation" (cf. Crystal & DeBell, 2012), are primarily learned within the family (for an overview, see Smetana et al., 2006; White & Matawie, 2004). Through parental practices such as teaching or discussing civic values and behaviors (e.g., Andolina et al., 2003; Boyd, Zaff, Phelps, Weiner, & Lerner, 2011; Diemer & Li, 2011; Erentaite, Zukauskien, Beyers, Pilkauskait-Valickien, 2012), adolescents can adopt their parents' moral or civic orientation (e.g., Hart & Fegley, 1995) and/or translate this orientation into civic behavior (e.g., Law & Check, 2009; Pratt et al., 2003).

However, the extent to which the transmission of this civic family orientation actually takes place depends on the content, style, and context in which this orientation is presented and communicated (e.g., Hardy, Padilla-Walker, & Carlo, 2008; Knafo & Assor, 2007; Pratt et al., 2003; Smetana & Metzger, 2005; White & Matawie, 2004). Generally, the internalization of values and orientations are stimulated when these are presented in a positive context. Research suggests that adolescents are more open to their parents' orientations and understand and analyze these orientations more, when family members stimulate each other's participation in family discussions and are open to each other's perspectives, in other words, when they use a more open family communication. This in turn increases the chance that adolescents internalize their parents' civic orientation (cf. Hardy et al., 2008; Smetana & Metzger, 2005; Thompson, Meyer, & McGinley, 2006; for an overview, see White & Matawie, 2004). Without this positive context of open communication, the internalization of the family's civic orientation and the translation of this orientation into civic behavior may not take place (cf. Rosenthal et al., 2010).

However, although open family communication can stimulate adolescents' internalization of the family's civic orientation, it is still unclear whether it also stimulates the translation of this civic family orientation into actual civic behavior such as adolescents' volunteering. In the current study, we therefore examined whether and how a more open family communication affects the relation between the civic orientation of the family and adolescents' volunteering behavior.

### **The role of age in the relative importance of parents and friends in adolescents' volunteering**

Until now, most research on volunteering has focused on the independent influence of parents' civic orientations and volunteering, and friends' volunteering. However, only a few studies have recognized the importance of studying the relative contribution of these influences in

adolescents' volunteering (McLellan & Youniss, 2003; Law & Shek, 2009; McGinley et al., 2010). Moreover, even less attention has been paid to the possible shifts in the relative contribution of these factors that may take place during adolescence. So the question arises whether the effects of parents' compared to friend's civic behavior on adolescents' volunteering may be age-dependent.

To address this question, we take the perspective of Smetana and colleagues (2006; Meeus, Oosterwegel, & Vollebergh, 2002) into account who assume that the relative amount of influence of parents compared to that of peers on adolescents' behavior depends on the topic or domain of this behavior. In line with this theoretical perspective, some studies found indication that parents have more influence on long-term issues, such as morality, school, and occupation (Smetana et al., 2006), whereas peers have more influence on present life-situations such as leisure time and friendships (cf. Meeus et al., 2002).

Based on this perspective and these findings, there are two alternative hypotheses on the importance of parents versus peers in adolescents' volunteering. The first hypothesis is that parents stay important, or become even more important for their children's volunteering behavior when adolescents grow older (e.g., Law & Shek, 2009; McGinley et al., 2010; White & Matawie, 2004). This is because volunteering is often considered to be moral behavior (e.g., McLellan & Youniss, 2003), and parents are important role models for moral behaviors (e.g., Smetana et al., 2006; White & Matawie, 2004). Furthermore, as adolescents grow older they further develop their moral conscience and identity (Eisenberg et al., 2005), and as a result the importance of parents in adolescents' volunteering could also increase. This may also imply that parents have a stronger influence on adolescents' volunteering than friends, which would even more strongly apply for older compared to younger adolescents. In contrast, the second hypothesis states that, as volunteering can also be part of a social activity or of sustaining relationships in daily life (e.g., McLellan & Youniss, 2003), the volunteering by friends may be as important as the volunteering by parents. Furthermore, when adolescents grow older and spend an increasing amount of time with their friends and peers (e.g., Smetana et al., 2006), friends may become even more important than parents for adolescents' volunteering (e.g., McLellan & Youniss, 2003). Again, this could apply more strongly to older than to younger adolescents.

In the current study we will test these two alternative hypotheses by examining the relative contribution of friends' volunteering, parents' volunteering, and of civic family orientation (combined with open family communication) in adolescents' volunteering, and the possible shifts with age in these relations, as presented in Figure 1.

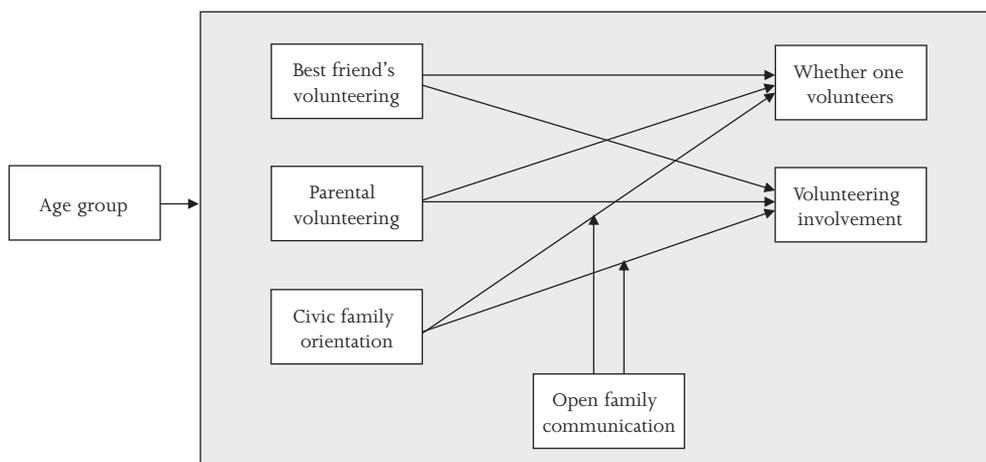


Figure 1. Hypothesized model: adolescents' volunteering (whether one volunteers and volunteering involvement) in relation to best friends' volunteering, parental volunteering, and the interaction between civic family orientation and open family communication, and the moderation of these hypothesized relations by adolescents' age group (younger and older adolescents).

## METHOD

### Participants and procedure

Data for our study came from 698 adolescents. Adolescents (47.7 % male, 52.3 % female) were between 12 and 20 ( $M = 15.19$ ;  $SD = 1.43$ ) years old, and came from eight higher general education and pre-university education high schools. 83.9 % of the adolescents were of Dutch origin, and 16.1 % were first or second generation immigrants: 8 % were Western immigrants and 8 % were non-Western immigrants. In addition, 58.7 % were non-religious whereas 41.3 % indicated to be a member of church or religious community. Religious adolescents indicated to be Catholic (24 %), Protestant-Christian (10.2 %), Islamic (4.3 %), Hindu (0.9 %), or indicated to have another religious background (1.9 %). Most adolescents came from two-parent, middle households (82.1%) and most adolescents had one or more siblings (90.4 %). Lastly, 33% of the adolescents indicated to have performed volunteering in the past year, which is in the range of volunteering ratings in Dutch society (MOVISIE, 2011).

Schools were approached and asked to participate in our study. After permission was obtained, schools were given information letters for the parents of the adolescents. In accordance with local ethical guidelines, passive consent was provided by all adolescents. In each school class, data were collected with a digital questionnaire (Netquestionnaires, [www.netq.nl](http://www.netq.nl)) in two separate 45 to 50-minute sessions. Each hour started with one or two trained examiner(s) personally assigning adolescents to the computers in the classroom to prevent friends from sitting next to each other. Adolescents were given a brief, standardized introduction and instruction, during which the individuality of the assessment and confidentiality of data-treatment were stressed.

## Measures

**Volunteering.** In the current study we used the two aspects of the Civic Prosocial Behavior Inventory (CPBI; van Goethem, van Hoof, van Aken, Boom, & Orobio de Castro, 2012) that assess whether adolescents volunteer and adolescents' volunteering involvement. Adolescents indicated whether they had ever volunteered in an organization during the past year. Organized volunteering work was defined as: activities within an organization, society, or club, which are intended to positively contribute to the environment, individuals, groups of people, or the society as a whole, without receiving money (small compensations are allowed). When adolescents indicated to volunteer, they were also presented with a set of twenty-two traditional as well as new forms of volunteering activities such as organizing an event, collecting money, demonstrating, or administering the website of an organization. They reported whether, and if so, how often they had performed each of these activities for the organization they had been most active in on a scale that ranged from one to seven: 1 = "not", 2 = "not, but maybe in the future", 3 = "among one to four times", 4 = "among five to ten times", 5 = "among once a month", 6 = "among once a week", 7 = "among several times a week". If adolescents indicated that they were active in a second organization, they answered the same questions again for that organization. All separate activity scores for maximally two organizations were recoded (1 = 0, 2 = 0, 3 = 1, 4 = 2, 5 = 3, 6 = 4, 7 = 5) and summed, with a higher score indicating a larger amount of time spent to volunteering work.

**Civic family orientation.** The social orientation scale, a subscale of the Dutch version (Deater-Deckard, Fulker, & Plomin, 1999; Jansma & De Coole, 1996) of the Family Environment Scale (FES; Moos & Moos, 1986), was used to assess adolescents' civic family orientation. Adolescents rated to what extent each of 11 statements applied to their own family on a 5-point Likert scale: 1 = totally true, 5 = totally not true. These statements were for example: "We often talk about political and societal problems" and "We are involved in things that happen in our neighborhood". Eight of these 11 items (3 items were removed due to low factor loadings [below .25]; the content of these items was not related to the overall factor of civic family orientation<sup>1</sup>) were used to calculate the average scale score, with higher scores indicating a more civically involved family orientation. Confirmatory factor analysis, conducted in SPSS, showed a satisfactory 1-factor solution, explaining 26.88% of the variance (all factor loadings > .37)<sup>2</sup>. The social orientation scale has shown to have a satisfactory reliability (Cronbach's alpha .63, Jansma & De Coole, 1996). In the present study reliability (Cronbach's alpha) was .59. Reliability decreased when one or more of the eight items were removed.

**Parental volunteering.** We used two items of the Perceived Parental Civic Behavior Inventory (PPCBI; van Goethem, 2012) to assess whether adolescents' mother and adolescents' father had

1 The 3 items removed were: "If there are troubles at work, we think you should keep out of them", "We prefer to buy each other things over making something ourselves", "On television, we only watch fun, relaxing programs".

2 Exploratory factor analysis showed a one or two factor solution. In accordance with former studies (e.g., Ganzendam et al., 2007), a one factor solution was chosen. Further, a two-factor solution did not improve scale reliability.

volunteered in an organization during the past year. Scores on these items were combined into a (total) score for whether (one or both of) adolescents' parents volunteered: yes = 1, no = 0.

**(Best) friends' volunteering.** The volunteering by adolescents' best friend in their school class and of their best friend outside of their school class was assessed, combined and coded as: 0 = "he/she did not volunteer" or 1 = "he/she volunteered".

**Open family communication.** The Open Communication scale, a subscale from the translated version (Jackson, Bijstra, Oostra, & Bosma, 1998) of the Parent Adolescent Communication Scale (PACS; Barnes & Olson, 1985), was used to assess open communication within adolescents' families. Adolescents rated to what extent each of 10 statements were true for their own family on a 5-point Likert scale: 1 = strongly disagree, 5 = strongly agree. These included statements such as: "My parents are good listeners" and "When I ask questions, I get honest answers from my parents". Scores were used to calculate an average open communication score, with higher scores indicating a more open family communication. This scale has shown to have a good reliability (Cronbach's alpha = .87, Barnes & Olson, 1985; Cronbach's alpha = .89, Jackson et al., 1998), which was also found in the present study: Cronbach's alpha = .90.

## Analyses

The hypothesized relations of adolescents' volunteering with friends volunteering, parental volunteering, civic family orientation, and the interaction between civic family orientation and family communication, were studied with Structural equation modeling (SEM) using Mplus (Version 6; Muthén & Muthén, 1998-2010). We used zero inflated poisson regression to account for the large number of zero-scores (non-volunteers) in our volunteering measure by combining a point mass at zero with a proper count distribution (for a detailed description of zero inflated poisson regression see Lambert, 1992). It combines predicting the inflated binary volunteering variable (not volunteering = 0 and volunteering = 1) with a regression predicting the value of the count dependent variable (the involvement in volunteering for adolescents who volunteered).

The percentages of missing data for the variables in our model varied between 6.6% (civic family orientation) and 20.6% (open family communication). Missing data were model estimated and Monte Carlo integration with robust maximum likelihood estimation (MLR) was used to calculate the bias-corrected standard errors and confidence intervals (Muthén & Muthén, 1998-2010). Multi-group analyses within Mplus were used to analyze the moderation effect of age on the hypothesized relations. Improvement in model fit was tested with the Satorra-Bentler  $\Delta\chi^2$ -difference test (Satorra & Bentler, 2001). This test can only be used as an index for relative model fit improvement, not as an absolute fit statistic.

## RESULTS

The number of adolescents, parents, and best friends who were indicated to volunteer are presented in Table 1. In Table 1 also the means and cross-tab reports for the hypothesized variables are presented. Parental volunteering and best friend's volunteering were positively related to both aspects of adolescents' volunteering: whether adolescents volunteered and their volunteering involvement. Further, adolescents' civic family orientation was positively related to whether adolescents volunteered (for adolescents who volunteered:  $M = 3.44$ ;  $SD = .41$ ; for adolescents who did not volunteer:  $M = 3.55$ ;  $SD = .39$ ;  $p_{diff} < .01$ ) and was marginally, positively related to adolescents' volunteering involvement ( $r = .07$ ;  $p = .06$ ).

The results of our main model are presented in Table 2. The relative model fit was:  $\ln L: -4145.37$  (number of freely estimated parameters = 32;  $c = 3.44$ ). We found that adolescents were more likely to volunteer when their parents or best friend also volunteered. Friends had a relatively larger effect on this aspect of volunteering than parents (respectively:  $\beta = .32$  and  $\beta = .19$ ;  $p_{diff} < .01$ ). The civic orientation of adolescents' family did not add to this prediction, neither did the interaction of civic family orientation and open family communication. In contrast to this finding, we found that parents' and friends' volunteering was not related to adolescents' volunteering involvement, but that civic family orientation and the positive interaction between civic family orientation and family communication were positively related to adolescents' volunteering involvement. Further inspection of this interaction effect showed that the relation between civic family orientation and volunteering involvement strengthened when the level of open communication increased.

Table 1  
Descriptives of the variables in our model

| Variable                   | Whether one volunteers (0-1) |     |        | Volunteering involvement |       |        |
|----------------------------|------------------------------|-----|--------|--------------------------|-------|--------|
|                            | 0                            | 1   | pdiff  | M                        | SD    | pdiff  |
| Parental volunteering      |                              |     |        |                          |       |        |
| 0                          | 192                          | 54  | < . 01 | 3.14                     | 8.76  | < . 01 |
| 1                          | 186                          | 143 |        | 6.65                     | 12.11 |        |
| Best friend's volunteering |                              |     |        |                          |       |        |
| 0                          | 294                          | 82  | < . 01 | 2.68                     | 7.22  | < . 01 |
| 1                          | 128                          | 148 |        | 8.54                     | 13.62 |        |

Note. For the outcome of whether one volunteers (0-1), the number of adolescents in each cell of the first 2 x 2 variable (parental volunteering 0-1 x whether one volunteers 0-1) and the second 2 x 2 variable (best friend's volunteering 0-1 x whether one volunteers 0-1) are presented. For those adolescents who volunteered (1), the average scores for parental volunteering (0-1) and best friend's volunteering (0-1) are also presented.

Table 2

The socialization of adolescents' volunteering by their parents and best friend

| Predictor                                  | Whether one volunteers (0-1) |     |         | Volunteering Involvement |     |         |
|--|------------------------------|-----|---------|--------------------------|-----|---------|
|  | b(OR)                        | SE  | $\beta$ | b                        | SE  | $\beta$ |
| Best friend's volunteering (0-1)           | 1.30** (3.67)                | .18 | .32     | .17                      | .14 | .24     |
| Parental volunteering (0-1)                | .75** (2.12)                 | .21 | .19     | .04                      | .25 | .05     |
| Civic family orientation                   | .22 (1.25)                   | .22 | .05     | .36*                     | .17 | .50     |
| Open family communication                  | .08 (1.08)                   | .14 | .03     | -.33**                   | .08 | -.77    |
| Civ. fam. orient. X<br>Open fam. communic. | -.14 (0.87)                  | .27 | -.03    | .33*                     | .14 | .42     |

Note. For the logistic regression part of the model (paths to whether one volunteers [0-1]), b's are logits. These logits are inverted to odds ratios (OR), which are presented between brackets. Odds ratios between 0 and 1 represent a decrease in the chance of having performed volunteering in the past year, and estimates above 1 represent an increase in the chance of having performed volunteering in the past year.

\*  $p < .05$ . \*\*  $p < .01$ .

### Age differences

Multi-group analysis revealed a better model fit when the parameters of the paths in our model were freely estimated for the two age groups (respectively, younger and older adolescents) than when these parameters were constrained to be equal for these groups (Satorra-Bentler corrected  $\Delta\chi^2(10) = 36.99, p < .01$ ).

The results for the path-parameters of each age group are presented in Table 3. We found age group differences for whether adolescents volunteered and for how involved adolescents were in volunteering. Within the group of older adolescents, whether adolescents volunteered was relatively more strongly related to the volunteering by their best friend than of their parents (respectively:  $\beta = .42$  and  $\beta = .24, pdiff < .01$ ). In contrast, within the group of younger adolescents, friends and parents had an equally strong effect on whether adolescents volunteered (respectively:  $\beta = .24$  and  $\beta = .15, pdiff > .10$ ). Furthermore, older adolescents were relatively more influenced by their friends' volunteering than younger adolescents (respectively,  $b = 1.78, SE = .26$  and  $b = .95, SE = .26, pdiff < .01$ ).

Concerning adolescents' volunteering involvement, we found that open family communication was negatively related to younger but not to older adolescents' volunteering. Further, for older but not for younger adolescents, civic family orientation and the interaction between civic family orientation and open family communication were positively related to a adolescents' volunteering involvement.

Table 3

Age group differences for the socialization of adolescent volunteering by their parents and best friend

| Predictor                               | Young        |     |      | Old           |     |      | pdiff |
|---|--------------|-----|------|---------------|-----|------|-------|
|   | b(OR)        | SE  | β    | b(OR)         | SE  | β    |       |
| Whether one volunteers (0-1)            |              |     |      |               |     |      |       |
| Best friend's volunteering (0-1)        | .95** (2.59) | .26 | .24  | 1.78** (5.93) | .26 | .42  | < .01 |
| Parental volunteering (0-1)             | .61* (1.84)  | .30 | .15  | 1.00** (2.72) | .26 | .24  | -     |
| Civic family orientation                | .49 (1.63)   | .30 | .12  | -.10 (0.90)   | .34 | -.02 | -     |
| Open family communication               | .24 (1.27)   | .20 | .09  | -.06 (0.94)   | .22 | -.02 | -     |
| Civ. fam. orient. X Open fam. communic. | -.73 (0.48)  | .51 | -.16 | .27 (1.31)    | .32 | .05  | -     |
| Volunteering involvement                |              |     |      |               |     |      |       |
| Best friend's volunteering (0-1)        | -.19         | .30 | -.19 | .23           | .15 | .31  | -     |
| Parental volunteering (0-1)             | .54          | .37 | .55  | -.25          | .20 | -.34 | -     |
| Civic family orientation                | -.12         | .36 | -.12 | .63**         | .16 | .84  | < .01 |
| Open family communication               | -.49**       | .14 | -.78 | -.12          | .11 | -.26 | < .01 |
| Civ. fam. orient. X Open fam. communic. | .11          | .30 | .10  | .52**         | .13 | .61  | < .01 |

Note. Young = adolescents of 12 to 15 years old; Old = adolescents of 16 to 19 years old. For the logistic regression part of the model, in which paths to whether one volunteers [0-1] are predicted, b's are logits. These logits are inverted to odds ratios (OR), which are presented between brackets. Odds ratio's between 0 and 1 represent a decrease in the chance of having performed volunteering in the past year, and estimates above 1 represent an increase in the chance of having performed volunteering in the past year.

\* =  $p < .05$ ; \*\* =  $p < .01$ ; pdiff = statistical significance of the age differences.

## DISCUSSION

The goal of the present study was to examine the relative importance of parents' volunteering, friends' volunteering, and civic family orientation combined with open family communication on both whether and how often adolescents volunteer. In addition, we examined how these relations were influenced by adolescents' age.

As expected, we found that adolescents were more likely to volunteer when their best friend volunteered and when their parents volunteered (e.g., Andolina et al., 2003; McLellan & Youniss, 2003; Metz & Youniss, 2003). Interestingly, best friend's volunteering had a relatively larger influence than parents' volunteering on how likely adolescents were to volunteer. Adolescents' civic family orientation, combined with an open family communication, was however not related to this aspect of volunteering.

The opposite was true for adolescents' volunteering involvement: adolescents were more involved in volunteering when their families had a stronger civic orientation, but their volunteering involvement was not related to their parents' and best friends' volunteering. Moreover, the connection between adolescents' volunteering involvement and civic family orientation was stronger when there was more open communication within their families. This suggests that when families discuss topics such as their civic orientation more openly and positively, adolescents are more likely to translate this civic orientation into civic behavior such as volunteering. Together with former research showing that open family communication may stimulate the internalization of civic family orientations (cf. Hardy et al., 2008; Smetana & Metzger, 2005; Thompson et al., 2006; White & Matawie, 2004), this finding may point to a process: stimulated by open family communication, the civic orientation of the family may be first internalized and then translated into civic involvement such as volunteering involvement. To further test this hypothesis, future research should examine the interrelations between the family's civic orientation, the quality of family communication on this orientation, adolescents' civic orientation, and changes in adolescents' civic behavioral involvement over time.

In addition to showing an indication for a possible value transmission process, our results show an interesting pattern: whereas others' civic behavior was related to whether adolescents also show this civic behavior or not, the civic orientation of the family combined with open family communication was related to how involved adolescents were in this civic behavior. This could mean that, depending on the aspect of volunteering, two different kinds and mechanisms of social influence may be important: modeling volunteering behavior (e.g., Janoski et al., 1998) may be most important in being active as a volunteer at all. So, watching or experiencing parents' or best friend's volunteering may be sufficient to make adolescents also start volunteering. In contrast, another process, the transmission of a civic orientation, (cf. Janoski et al., 1998) may be more important in the time and effort adolescents spend in these volunteering activities (cf. McGinley et al., 2010). In other words, although parents may model becoming a volunteer, only when adolescents talk openly with their family on civic issues and the importance of being civically involved, adolescents may identify with these civic issues and become more involved in their volunteering activities. These findings support and refine the model proposed by Janoski and colleagues (1998) presented earlier, suggesting that the importance of behavioral modeling compared to value transmission in the socialization of volunteering may depend on the aspect of volunteering concerned. This idea also adds to a model by Penner (2002) on the development and maintenance of volunteering. He theorized that social pressure may be most important for the start of volunteering whereas other factors, including personal values, may be important for whether one is also involved and stays involved in volunteering. Our findings suggest that in addition to personal values, family orientations and values can also be important for volunteering involvement.

Lastly, our finding that whether and how often adolescents volunteer may be affected by different kinds and mechanisms of civic behavior supports the idea that these volunteering behaviors may be two qualitatively different aspects of volunteering. It could be that whether one volunteers could be an indication of being an active citizen or person, whereas how often

one volunteers could be an aspect of civic engagement or a civic identity (e.g., Rose-Krasnor, 2009). However, more longitudinal research with detailed assessment of the proposed mechanisms is needed to test this idea that whether adolescents volunteer and the degree to which adolescents are involved in volunteering, are actually qualitatively different and driven by different processes (cf. McGinley et al., 2010).

### **The role of age in the relative importance of parents and friends for adolescents' volunteering**

In addition to the findings for our general adolescent sample, we found that it was important to distinguish between younger and older adolescents when studying the influence of parents and friends on adolescents' volunteering. First, the results of the general sample suggest that friends' volunteering was relatively more important than parents' volunteering for whether adolescents volunteered. However, we found that this only applied for older but not for younger adolescents; parents and the best friend were equally important for whether younger adolescents volunteered. Overall, best friends' volunteering was also less strongly related to younger compared to older adolescents' volunteering.

These findings are in accordance with the general idea that peers become increasingly important in the socialization of adolescents' civic behavior over time (e.g., McLellan & Youniss, 2003). But why would this be the case? Does friends' volunteering become more important for adolescents' volunteering compared to parents' volunteering because adolescents generally spend an increasing amount of time with their friends and peers and are therefore more exposed to their friends' behavior and behavioral modeling (e.g., Smetana et al., 2006)? Or is it maybe that, with increasing age, adolescents more often fulfill volunteering activities together with their friends? This suggests that the nature of adolescents' volunteering would become more akin to activities with peers as adolescents grow older and volunteering therefore becomes more integrated and part of the domain of peer relations and leisure time (cf. McLellan & Youniss, 2003). This latter explanation may be plausible as we know that when adolescents become older, they more often become youth leaders or assist with (volunteering) activities within the organizations where they also perform their leisure time activities, such as coaching a team of younger soccer players (e.g., Marsh & Kleitman, 2002). Additionally, adolescents often perform these leisure activities and volunteering activities with others they are socially tied to such as their friends (e.g., Wilson, 2000).

In addition to the effect of age on the prediction of whether adolescents volunteer, an important age effect was found for adolescents' volunteering involvement. We found that the civic orientation of the family combined with an open family communication only influenced the volunteering involvement for older but not for younger adolescents. This finding could be an indication of a developmental phenomenon: previous studies have shown that during adolescence, youngsters strongly develop their moral and civic consciousness and identity (Chapman & Morley, 1999; Eisenberg et al., 2005; Meeus, Iedema, Maassen, & Engels, 2002; Torney-Purta & Amadeo, 2003). This is also because they get more opportunities to become civically involved for instance by performing school-organized community service (e.g.,

Dovidio, Piliavin, Schroeder, & Penner, 2006; Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005; Youniss, McLellan, & Yates, 1997) and by acquiring more political and legal rights such as the right to work and to vote. Therefore, moral and civic orientations and motivations become also more important for their civic behaviors (e.g., Chapman & Morley, 1999).

In addition to one's own civic orientation, our findings suggest that also the civic orientation of others become more important for civic behavior during adolescence. This would explain why only for older adolescents, for whom civic orientations have come to play a more important role in their civic behavior, civic family orientation influences the amount of time and effort they invest in volunteering.

### **Strengths, limitations, and conclusions**

The most important strength of our study was that, in contrast to most former research, we examined the relative importance of parents and friends in adolescents' volunteering. These are two of the most important social influences in adolescents' (prosocial) development. Further, we considered whether and how the relative importance of these socializing agents could be influenced by adolescents' age as this can influence how adolescents respond to the civic behavior of their parents and friends. Another important strength of our study was that we differentiated between two aspects of volunteering: whether adolescents volunteer and how involved they are in their volunteering.

The present study also has some limitations. First, the cross-sectional design of our study does not allow conclusions about development or causal links between the studied variables. Theoretically, we focused on the influence of friends and parents on adolescents' volunteering. However, as adolescents may often volunteer along with their friends or parents, the socialization of volunteering may also be a reciprocal process (cf. McLellan & Youniss, 2003; Pancer & Pratt, 1999; Pratt et al., 2003). Therefore, more studies with longitudinal designs are needed to examine these mutual relationships over time.

Second, our findings solely rely on self-reports. Although self-reports are valid ways to assess thoughts and experiences among adolescents (e.g., Hart & Carlo, 2005), they can also be influenced by social-desirability (e.g., Moely et al., 2002). Future research could further validate our findings by using more objective measures, such as parents' and friends' reports on adolescents' volunteering behavior.

Third, the scale used to measure civic family orientation had a relatively low internal consistency (Cronbach's Alpha of .59), which should be taken into account when interpreting the results.

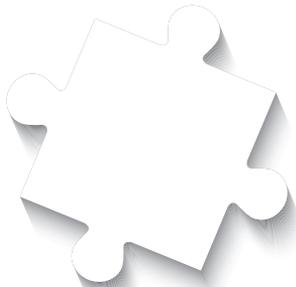
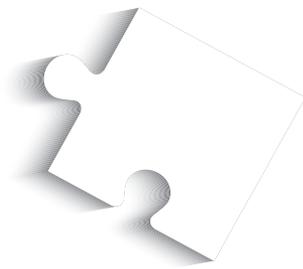
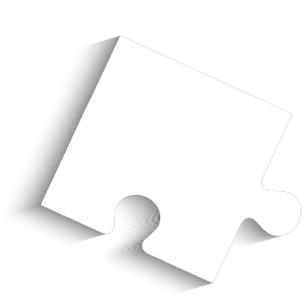
Fourth, we did not consider the civic orientation of adolescents' best friend and the level of open communication between adolescents and their best friend in our study. Adding these concepts in future research could be an important way to further examine the nature of the differential effect family versus friends may have on adolescents' volunteering.

Fifth, our findings should also be considered in the Dutch context in which the study was conducted. On the one hand, our findings confirm and extend previous findings on the importance of behavioral modeling and value transmission for adolescents' volunteering to contexts outside of the USA. On the other hand, it could be that (some of) our findings may be specific to the Dutch population, or more generally, to West-European or Western countries. For example, in their review on adolescent development, Smetana et al. (2006) refer to earlier findings that European American (young) adolescents may experience more conflicts with parents and are less compliant with parents' wishes than are adolescents from other ethnicities such as from Asian cultures. This could for example imply that open family communication may be more important for the transmission of civic family orientation for adolescents from European, European-American, or Western cultures than for adolescents of non-Western cultures. Further, a cross-national study by Larson and Verma (1999) showed that the time spent with parents and peers during adolescence is country and culture specific. For example, European-American and Dutch parents spend less time with their adolescent children over time (Dubas & Gerris, 2002). However, the amount of time African-American parents and parents from post-industrial Asian countries such as India spend with their children does not change during adolescence and is on average higher than among European-American and Dutch families (Larson & Verma, 1999). These differences between countries and cultures could affect parents' and peers' influence on adolescents' volunteering behavior. To examine the generalizability of our findings, more replication studies in Western and non-Western countries and cultural contexts are needed. In addition, as our sample only included higher-educated adolescents, replication studies that also include lower-educated adolescents could be valuable.

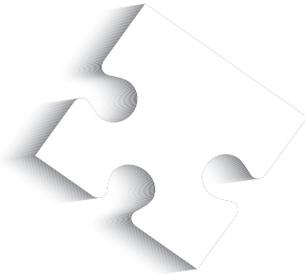
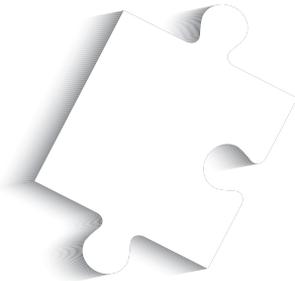
In conclusion, our study suggests that when examining the socialization of adolescents' volunteering, it is important to distinguish between two aspects of volunteering: whether adolescents volunteer and how involved adolescents are in volunteering, and to distinguish between younger and older adolescents. Adolescents are more likely to volunteer when their best friend and parents also volunteer. Moreover, when adolescents become older, their best friend has a relatively stronger influence on whether they volunteer than their parents. Further, only when adolescents become older, they are more involved in volunteering when their family has a stronger civic orientation and talks openly about this orientation.

For current and future initiatives in socializing volunteering among adolescents, it may be important not only to directly target adolescents' volunteering behavior, but also to target their behavior indirectly, through their (close) friends and family. Depending on whether the initiative is aimed at initiating volunteering or increasing volunteering involvement and the age of the adolescents, different socialization methods and socializing agents may stimulate adolescents' volunteering behavior.





## **The Role of Reflection in the Effects of Community Service on Adolescent Development: A Meta-analysis**



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## ABSTRACT

This meta-analysis assessed the effect of community service on adolescents' development and tested the moderation of this effect by reflection-, community service-, and adolescent-characteristics to explicate the mechanisms through which community service operates. Random-effects analyses, based on forty-nine studies (24,477 participants), revealed that community service had positive effects on academic, personal, social, and civic outcomes. Moderation analyses indicated that reflection was essential; the effect for studies that include reflection was substantial (Mean ES = .41) while community service in the absence of reflection yielded negligible benefits (Mean ES = .05). Effects increased when studies include: more frequent reflection and community service, reflection on academic content, and older adolescents. These findings have implications for understanding and improving community service (interventions).

## INTRODUCTION

Perhaps the most commonly prescribed intervention for adolescents is *community service*. It is required in some countries (e.g., the Netherlands; Rijksoverheid, 2007) and states (e.g., Maryland; Maryland State Department of Education, n.d.), and is promoted by innumerable national and non-governmental agencies. Proponents have claimed that community service—(often) organized, unpaid activities that are intended to benefit the environment, individuals, groups of people, or society (cf. van Goethem et al., 2010)—deepens adolescents' academic, personal, social, and civic development (cf. Conway, Amel, & Gerwien, 2009; Stukas, Clary, & Snyder, 1999) and can benefit the communities in which community service occurs (e.g., Melchior, 1998). Community service for adolescence, the literature at times suggests, is the first-choice intervention for many of the ills of adolescence (cf. Hart, Matsuba, & Atkins, 2008). Of course the popularity of an intervention is not a demonstration of its efficacy. The first aim of this paper is to critically examine the evidence for the benefits of community service for adolescents, which is necessary for judging the wisdom of the widespread adoption of community service interventions. We use meta-analysis to synthesize the research evidence and, in contrast to several recent reviews of the literature (described in a section below), draw only from studies featuring designs that permit inferences of causal influence.

In addition to assessing the efficacy of community service programs, our *second aim* is to identify the conditions and processes through which community service influences adolescents' development. Earlier community service research suggests that community service effects may depend on the characteristics of the community service and the characteristics of the adolescents who perform the community service (e.g., Eyler, Giles, 1999; Furco, 2002).

One particularly crucial, unresolved debate concerns the importance of what is typically labeled *reflection*. Reflection refers to thoughtful consideration of the community service activity, and may play a critical role in the translation of the community service experience into enduring

psychological benefits (e.g., Ogden & Claus, 2006). Unfortunately, published assessments of community service programs including a reflection-component typically provide so little detail about reflection that it is difficult to ascertain its importance and impossible to determine what kinds of reflection are particularly valuable. To rectify this limitation of the published literature, necessary to use meta-analysis to test the importance of reflection, we obtained extensive details about the nature of the reflection experience by contacting the study-authors. By augmenting published findings with newly collected information about the nature of the reflection experience, we are able to test hypotheses about developmental processes that cannot be examined using the published literature alone.

### **Community Service and Adolescents' Development**

Adolescence is considered a sensitive period for the development of civic engagement, such as community service. This is for example because during adolescence youngsters further develop their understanding for the needs and perspectives of others and society (cf. Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005). Simultaneously, adolescents get more civic rights and civic opportunities such as school-organized community service (e.g., Youniss, McLellan, & Yates, 1997).

*Community service*, in its common connotations, is quite similar to *volunteering* and *service-learning*. All involve unpaid work intended to help others. Community service and service-learning tend to be more programmatic initiatives organized for groups of adolescents than volunteering; service-learning often includes a reflection component while organized reflection may or may not be a component of volunteering and community service (Hart et al., 2008). Yet community service, volunteering, and service-learning are all thought to promote adolescents' development in the academic, personal, social, and civic domains, including competence (behavior, skills, efficacy,) attitudes (ideas, assumptions, evaluations, motivations), and related outcomes (e.g., Conway et al., 2009; cf. Eyler, Giles, Stenson, & Gray, 2001; Stukas et al., 1999). Indeed, some reviewers have claimed that conceptual distinctions among community service, volunteering, and service-learning are not reflected in the proposed effects of these activities on adolescent outcomes (Hart et al., 2008). Because of the conceptual and empirical overlaps among community service, volunteering, and service-learning, we examined studies of all three types with differences among them captured by our coding system (described in a later section).

Four meta-analyses (Celio, Durlak, & Dymnicki, 2011; Conway et al., 2009; Novak, Markey, & Allen, 2007; White, 2001) provide support for the efficacy of community service for promoting adolescents' development. All four find evidence that adolescents' participation in community service is associated with positive outcomes in a variety of domains.

However, each of the existing meta-analyses has peculiarities that limit its ability to critically assess the value of community service as an intervention. The four meta-analyses feature liberal inclusion criteria for evaluations of community service interventions. The benefit of this approach is that estimates of the efficacy of community service are based on many effect

sizes culled from a large number of studies. The cost, however, is that these meta-analyses included many studies with designs that do not provide much basis for causal inference. It is possible in meta-analysis to test for the effects of the quality of research design on the estimated effect sizes resulting from the inclusion of heterogeneous studies, and indeed we use this approach in our analyses. Yet statistical adjustment for wide variations in quality of research design may not result in the correct estimates of intervention efficacy; the conclusion of methodologically weak studies in meta-analyses can obscure real effects that are apparent in studies featuring high quality designs (cf. Juni, Witschi, Block, & Egger, 1999).

Two of the existing meta-analyses have included studies without a control group (Conway et al., 2009; White, 2009) which prevents making inferences on whether found effects are due to participation in community service or are due to changes that would occur without community service participation. Further, three of these meta-analyses have included studies that do not measure *change* through pre- and post-intervention assessments (Celio et al., 2011; Novak et al., 2007; White, 2009) which prevents determining whether participants who performed community service may already differed from the control group before they started the community service, for example due to selection bias (Higgins & Green, 2006). We exclude such studies and studies that lack a control group in our analyses. As the number of randomized-controlled studies is too small in this field of research, randomization was not used as an additional inclusion criterion. Lastly, as the research on community service has advanced considerably since the previous meta-analyses were performed, our meta-analysis also gives insight into the most recent evidence on community service effects.

### **How Does Community Service Work?**

If community service has benefits for adolescents, what processes are responsible? And what conditions optimize beneficial effects? Clearly, an answer for these questions is important for theoretical and programmatic reasons. The conditions and processes through which community service effects change in teenagers inform the understanding of adolescents' psychology. For example, if community service works by providing adolescents opportunities to enact new patterns of behavior—a collection of actions that might be called the *volunteer role*—then it can be inferred that adolescents benefit developmentally from enacting types of altruism. Interventions would then be designed with considerable attention to the nature of the community service. Alternatively, community service's benefits might result primarily from deliberative consideration of voluntary actions on behalf of others, which might reveal moral principles, civic obligations and social inequalities, and the connections between ideas learned in the classroom and the details of life. This would mean that the altruistic behavior serves as a raw material transformed through reflection into psychological development. The programmatic emphasis deriving from such an insight would be on the characteristics of reflection that best facilitate the transformation of generic experiences helping others into durable benefits.

Our goal is therefore to use this meta-analysis to identify pathways of influence from community service to changes in adolescents' behavior and attitudes. Specifically, we test

the moderation of the association of community service with adolescent outcomes by reflection, characteristics of the service activity, and characteristics of the adolescents who perform this service activity.

### Reflection

In the community service-literature it is generally thought that reflection plays a decisive role in the learning potential of community service experiences (e.g., Ogden & Claus, 2006). Through critical reflection adolescents thoughtfully and intentionally perform and examine the community service experience in light of particular learning objectives (e.g., Hatcher & Bringle, 1997) which often involves the examination of the academic, personal, social, or civic meaning and (larger) context of these service experiences (cf. Toole & Toole, 1995, p. 100). As a consequence, reflection could further enable adolescents to learn and benefit from these service experiences (e.g., Billig, 2009; Hatcher, Bringle, & Muthiah, 2004).

Despite the many claims for the centrality of reflection for effective community service, surprisingly little evidence can be marshalled in support. One reason for the gap between these theoretical claims and empirical support is that research articles assessing community service featuring reflection have either provided little detail about the nature of the reflective experience or characterize the reflection elements in ways that do not easily permit aggregation across studies. The consequence is that recent meta-analyses (Celio et al., 2011; Conway et al., 2009) characterize interventions in which adolescents for example use artwork to express their service experiences and adolescents who are asked to discuss on the societal implications of their service experiences both to be engaged in reflection. In our view, these activities are so disparate that only aggregating them into a single analytic category may not be useful and sufficient. We contacted authors of research papers in order to obtain details about the nature of the reflection used in their interventions, and consequently are able to construct meaningful analytic criteria (these are described below) for analysis.

Second, some skeptics (e.g., Hart et al., 2008) have argued that the centrality of reflection for community service is weakened by the apparent similarities in outcomes between service-learning (as noted earlier, typically requiring reflection) and volunteering (most often lacking programmatic reflection). Both service-learning and volunteering are empirically associated with prosocial dispositions and civic engagement, for example (Hart et al., 2008). One interpretation of this finding is that the feature differentiating service-learning and volunteering—structured reflection—is unnecessary.

Finally, it might be argued that the benefits of community service, especially its socio-moral benefits, are unlikely to result from reflection because moral conduct such as community service, is largely governed by intuitions and emotions largely impenetrable to reflection. Haidt (2001) seems to make such a claim when he argues that moral reasoning “does not cause moral judgment; rather, moral reasoning is usually a post hoc construction, generated after a judgment has been reached” (p. 814). As Pizarro and Bloom (2003) note, Haidt’s position suggests that deliberative reasoning can do little to affect people’s moral judgments and actions. In the context of community service, the implication apparently would be that

reflection on community service activities is unlikely to affect these activities or the moral appraisals of them. As a consequence, reflection on community service would have little effect on socio-moral development.

Thus, the actual importance of reflection for community service effects is currently unclear. Moreover, if reflection is important, what kinds of reflection activities are responsible for these effects and represent reflection of high quality (e.g., Lemming, 2001)? To clarify these issues we study how the impact of community service is affected by the quantity and quality of reflection (e.g., Hatcher & Bringle, 1997), represented by different reflection-characteristics.

The moderation-effects of the following reflection characteristics are examined: the *quantity of reflection*, the *form of reflection*, the *social context of reflection* (cf. Eyler, 2001), the *content of reflection*, and the *overall quality of reflection*.

**Quantity of reflection.** Some studies have shown that more reflection would positively stimulate community service effects (e.g., overview by Billig, 2009) as it may help to process community service experiences more thoroughly (e.g., Eyler, 2002). In the literature two aspects of the quantity of reflection can be distinguished: (a) the frequency of reflection, which refers to the number of instances of reflection and (b) the regularity of reflection, which is often interpreted as the time spent on reflection in all community service phases: prior to community service (preparation), during community service, and when community service activities are finished (celebration, evaluation; Billig & Weah, 2008).

Researchers suggest that reflection has its advantages in each of the community service phases. First, reflection before adolescents start community service is said to be crucial as reflecting on one's expectations and assumptions may prepare adolescents for new experiences and complex issues (cf. Eyler, 2002). This, in turn, may optimize subsequent learning from community service experiences (cf. Clary & Snyder, 1999; Eyler, 2002; Ogden & Claus, 2006; Steinke et al., 2002). Second, reflection during community service is thought to be important as it enables to directly link reflection to community service experiences; thinking and action are strongly connected in this period (Eyler, 2002). Last, when community service is finished, reflection is important as it can be used to consolidate learning; adolescents examine and integrate what they have learned (Eyler, 2002; Ogden & Clause, 2006) and consider its use in other life domains and future (civic) activities (Eyler, 2002). The moderation effect of reflection in a particular community service phase as well as the moderation effects of both aspects of the quantity of reflection are therefore examined in this study.

**Form of reflection.** Some suggest that the form in which reflection takes place can influence community service effects. For example, writing on community service experiences is a well-recommended reflection practice (e.g., Bringle & Hatcher, 1999; Steinke, Fitch, Johnson, & Waldstein, 2002), especially structured assignments that provide means to focus on particular ideas or themes connected to the community service experience (Waterman, 1997). Further, participating in (guided) discussion is often suggested to be a very effective form of reflection

(e.g., Ostheim 1995; Steinke et al., 2002). Lastly, some also suggest that effective reflection would include a combination of reflection forms: verbal, written, and artistic and non-verbal forms of reflection (Billig & Weah, 2008). The current study therefore examines the moderation effect of various individual reflection forms as well as this combination of reflection forms.

**Social context of reflection.** Reflection effects could also be influenced by the social context in which it occurs: whether adolescents reflect on their own, with others, or both. Indication has for example been found that discussing community service experiences with peers and/or with teachers may strengthen community service effects (e.g., Batchelder & Root, 1994; Steinke et al., 2002) as, this way, adolescents are presented with alternative viewpoints and may be stimulated to reflect more intensively and critically (cf. Eycler, 2002; Waterman 1997). Further, Youniss and Yates (1997) suggest that a combination of private- (reflecting on oneself) and public reflection (i.e. with peers or adults) would positively affect the impact of adolescents' community service on their identity formation. Therefore the current study examines the moderation effect of individual social contexts of reflection, the moderation effect of reflection with others (teachers and peers), and the moderation effect of a combination of reflection with others and reflection on one's own.

**Content of reflection.** The content of reflection, that is, on what kind of community service experiences or issues adolescents reflect, may also play an important role in the overall impact of community service (cf. Billig & Weah, 2008) and in determining in what domains adolescents may change during their community service experiences (cf. Waterman, 1997). In accordance with the outcome categories used, we distinguish between four main content categories: academic, personal, social, and civic reflection (cf. overview by Molee, Henry, Sessa, & McKinney-Prupis, 2010), which each are being subdivided into competence focused or attitude focused reflection. The former kind of reflection focuses on competence and behavior related topics (reflection on one's competences and behaviors in relation to school, oneself, others, and society), whereas the latter kind of reflection focuses on ideas-, evaluations-, and motivation- related topics (reflection on one's feelings and thoughts about school, oneself, others, and society). Further, as community service interventions often include reflection on topics that are connected to academic courses (e.g., math, science), we also examined this type of reflection to which we refer to as "reflection on academic content and competence".

Although there is little research connecting specific reflection contents to community service effects, some research suggest that stronger, overall effects can be obtained if adolescents reflect on their social and civic ideas, preconceptions and responsibility, on possible solutions for complex social, and civic issues, and on the connection between their community service experiences and these issues (Billig & Weah, 2008). This involves reflection on attitude related topics in the personal, social and civic domain. In addition, some agreement also exists on the idea that more positive community service effects could possibly be found when the content of the reflection activity matches the content of the outcome category (e.g., Lemming, 2001; cf. Waterman, 1997). For example, it was found that reflection on moral dilemmas

and issues raised during the service experience increased adolescents' moral awareness and responsibility (reflection and outcome both in the social domain) but not their self-esteem (personal domain) or anticipated future community service (civic domain; Lemming, 2001).

In the current study, we examine the moderation effect of each reflection content category on community service effects. Further, we test the two ideas on the effectiveness of certain combinations of reflection contents: whether effects are stronger when adolescents reflect on attitude-related topics in the personal, social, and civic domain, and whether effects are stronger when the content of the reflection and outcome category match.

**Overall quality of reflection.** In addition to the impact of separate quality aspects of reflection, we also consider how a combination of these aspects, representing overall reflection-quality, may influence the impact of community service. Billig and Weah (2008) are one of the few researchers who have proposed a framework for overall reflection quality. They propose that high quality reflection should contain all of the following three elements. It should: (a) have a sufficient duration: occur both before, during, and after community service (*quantity of reflection*); (b) be practiced in a variety of forms: verbal, written, artistic, and nonverbal (*form of reflection*); (c) be about attitude-related topics in the personal, social, and civic domain (this criterion is further explained in the former section on the *content of reflection*). We will examine whether the combination of these three elements moderate the overall community service effect.

### **Characteristics of the Community Service Activity**

**Quantity of community service.** A general assumption is that experiences, including community service experiences, are more educative and therefore more effective when one has these experiences more often (cf. Conway et al., 2009). How often adolescents have these experiences, also referred to as the *quantity of community service*, is therefore considered to be a key feature in determining community service benefits (Stukas et al., 1999). The quantity of community service can be divided into the frequency (community service hours), duration (community service weeks), and intensity (number of concentrated block of time in which one performs community service; cf. Billig & Northup, 2008) of community service activities. And although there has been support for a positive relation between a larger quantity of community service and positive outcomes (e.g., overview by Billig, 2009; Hecht, 2003; Melchior & Bailis, 2002), this assumption was not confirmed by other studies (e.g., Conway et al., 2009). They alternatively suggested that a non-linear relation between the quantity of community service and service outcomes may exist. Conway et al. (2009) for example suggested that increasing beneficial effects may occur to among forty hours of community service (per one or two semesters) and decreasing positive effects may occur when more than forty community service hours are performed. However, according to Conway et al. (2009) and other researchers (e.g., overview by Scales et al., 2000) this cut-off point is disputable. In the current study, we therefore not only examine the relation between the quantity of community service and the impact of community service, but also the shape of this relationship.

**Kind of community service.** There is growing amount of literature suggesting that the kind of community service experiences determine how community service will influence adolescents' development. Indication has been found that community service effects are stronger when community service activities include one or more of the following three characteristics: (a) fragile service group: community service is directed to people who are fragile (e.g., children, homeless people, seniors); (b) community service that is needed: community service that is important for others' emotional or physical well-being (e.g., providing food, housing, and support); (c) personal contact with the service group: community service that involves having direct, personal contact with the people one performs the community service for. Among others, these characteristics may positively contribute to the development of social and civic attitudes and understanding, and to the empowerment of adolescents (e.g., Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004; McLellan & Youniss, 2003; Steinke et al., 2002; Reinders & Youniss, 2006). In the current study, we therefore also examine whether these kinds of community service strengthen the overall community service effect.

### **Age and Sex**

**Age.** As adolescence is a period in which youngsters undergo large changes, it is important to consider whether and how younger and older adolescents may be differently affected by community service (e.g., Hamilton & Fenzel, 1988). Based on some former studies (e.g., Hecht, 2003; Melchior & Balis, 2002), we expected that the effects of community service and community service interventions would be stronger for older adolescents. This could for example be because, with increasing age, adolescents consider and value the perspectives and needs of others more (cf. Eisenberg et al., 2005; Youniss, McLellan, & Yates, 1997). This change could make them more open to, and consequently more affected by, civic activities and interventions such as community service. We will test this hypothesis by examining the impact of age on community service effects.

**Sex.** As adolescence is considered to be a period of further gender differentiation in children's behavior and socialization by others, adolescents' sex could also have an important influence on community service effects. On the one hand, the effect of community service could be stronger for girls than boys (e.g., Hamilton & Fenzel, 1988). This is because girls are generally socialized to be more caring and nurturing than boys, which is connected to the forms of community service often performed in community service and service-learning interventions (cf. Metzger & Smetana, 2009; e.g., Scales et al., 2000). On the other hand, the same reasoning may be used to suggest that boys are more strongly affected by community service than girls. Adolescent boys may show more growth due to these kinds of community service, as they are less likely to have internalized societal norms related to community service yet, especially nurturing and caring forms of community service (e.g., Switzer, Simmons, Dew, Regalski, & Wang, 1995).

### **Interaction of Moderator Variables**

Some research has suggested that although some community service characteristics, including reflection, may make community service (interventions) generally more effective, other

community service characteristics may only work for certain kinds of people (cf. Warter & Grossman, 2002). In other words, the influence reflection may have on the effects of community service may interact with adolescents' characteristics. For example, reflection may have a stronger impact on community service effects for older than for younger adolescents, as older adolescents may have further developed reflection capabilities (e.g., moral reasoning skills; Eisenberg et al., 2005). Similarly, interactions may exist between reflection and the other community service moderator variables. For example, the quantity of community service and reflection may strengthen each other's impact on community service effects (e.g., Blyth et al., 1997). In addition to the impact of each of the before mentioned moderators on the effects of community service, we therefore also explored whether reflection, the moderator we focus on, interacted with all other moderators we examined.

In sum, our meta-analysis examines the impact of community service and community service interventions on adolescents in general and in the domains of academic, personal, social, and civic outcomes. Further, we examine how reflection and, more specifically, various aspects of reflection (the quantity of reflection, the form of reflection, the context of reflection, the content of reflection, and the quality of reflection) affect the overall community service effect. In addition, we examine how other characteristics of community service and community service interventions (the kind of community service and the quantity of community service) and characteristics of the adolescents who perform the community service (sex and age) impact the overall community service effect.

## METHOD

### Study Selection

We included all empirical studies that examined the effects of volunteering, community service, and service-learning on adolescents' development between 1980 and September 2012. Four methods were used to locate relevant studies. First, using the search words "volunteer\*", "community service", "service-learning", "civic engag\*," and "civic involve\*," in combination with the search words "adolesc\*", "high school", "middle school", "secondary school", "youth", "teenage\*", and "student", a literature search was performed in databases "PsycINFO" and "ERIC". Second, reference lists from meta-analyses and reviews in the field were inspected. Third, various national and international research websites (e.g., [www.civicyouth.com](http://www.civicyouth.com); [www.servicelearning.org](http://www.servicelearning.org)) were inspected for relevant research articles. Fourth, experts in the field of volunteering, community service, service-learning, and civic engagement were contacted in order to find additional relevant studies.

### Inclusion Criteria

Studies that met six criteria were included in our meta-analysis: (a) appeared between January 1980 and September, 2012; (b) evaluated volunteering, community service or service-learning; (c) included adolescents between 12 and 20 years old who did not have a mental disability; (d) used a control group; (e) used a pre- and post-measure or a post-measure combined with

randomization of the volunteering, community service, or service-learning (treatment); (f) contained sufficient information to calculate or estimate effect sizes. Forty-nine studies (a list of these studies and their main characteristics with details of effect size calculation is available from the corresponding author on request) were included in our meta-analysis.

### Coding Procedure

A coding scheme for the study variables, the moderation variables, and the outcome variables is presented in Appendix A. Studies were coded by a trained independent research associate and twenty percent of the studies were additionally coded by the first author. All variables were coded reliably (Cohen's kappa ranged from .62 to 1), except for coding whether the community service was mandatory or not which therefore was not used in our analyses (Cohen's kappa = .23).

As generally studies included little information on *reflection* characteristics, we retrieved additional information on these characteristics by sending a questionnaire to the study-authors (available upon request). For 69% of the studies we retrieved a completed questionnaire. These responses were added to our study coding. Together, this resulted in 34 studies with reflection, 8 studies without reflection, and 6 studies with a missing value on the variable that indicated whether participants reflected or not.

In addition, the three elements of the *quantity of community service* (community service hours, weeks, and number of concentrated blocks of time in which community service is performed) were highly correlated ( $r = .83 - .93, p < .01$ ). As the number of community service hours (community service frequency) is the most commonly reported aspect of the quantity of community service, we chose to use this measure as a proxy for the overall quantity of community service in our moderation analyses. Two extreme outliers were found for the number of community service hours (resp. 288 and 684 hours), which were replaced by the third highest number of hours (180 hours).

Further, as two aspects of the *kind of community service* ([a] community service for vulnerable people; [b] that fulfills important emotional or physical needs of others) largely overlapped ( $\chi^2(1,12) = 21.39, p < .01$ ), these aspects were aggregated into one overall score representing vulnerable service groups in need of that service: community service that is important for the emotional and/or physical well-being of a vulnerable service group. Further, as there was no variance in the third aspect of the kind of community service, having personal contact with the service group (all studies that provided information on this moderator [ $k = 20$ ], involved personal contact with the service group), we could not examine its impact on the overall community service effect. It however also means that when community service was performed for a vulnerable group in need, it also involved personal contact with this group.

### Index of Effect Size and Statistical Procedures

Effect sizes were calculated as gain scores, derived from differences in (pre-post) standardized change scores between treatment and control groups. Effect sizes were weighted by the inverse

variance weight, derived from each study sample size (Hedges & Olkin, 1985). In all cases, positive ES values indicate the service group gain was superior to the control group gain. When calculating effect sizes for outcomes in which “no effect” or “no significant effect” was reported, we assigned a conservative effect size estimate of zero. A general treatment effect as well as treatment effects for specific outcome categories were calculated (representing academic, personal, social, and civic outcome domains). If studies collected data on multiple measures within the same category, the effect sizes for these outcomes were averaged to create a single effect for that category. Main effects as well as moderation effects were calculated using a random effects model (with RMLE) as the effect size distribution was significantly heterogeneous ( $Q(48) = 3744.16, p < .01$ ; Raudenbush, 2009).

At least four studies were required in each cell for tests of moderator effects. For the moderation effects of reflection characteristics, we examined for each aspect of the examined reflection-categories (the *quantity of reflection*, the *form of reflection*, the *social context of reflection*, and the *content of reflection*) whether using that aspect of reflection yielded a stronger community service effect than (a) using no reflection, and (b) not using that aspect of reflection but using other aspects of the same reflection category. Finally, we performed regression analyses to examine the interactions between the hypothesized moderators.

## RESULTS

### Main Effects of Community Service

The frequency distribution of the study variables is presented in Appendix A. The column ‘all studies’ of Table 1 presents the mean ESs and 95% CIs for the overall, aggregated outcome and each outcome category. Community service yielded statistically significant, small to moderate effects in all outcome areas.

To examine whether study outliers or methodological and publication characteristics could account for these effects, we examined their impact on the overall effect size. Similar effects were found when the only study with an extremely large effect size (Lemming, 2001) was removed from the analysis ( $k = 48, \text{Mean(ES)} = .29, 95\% \text{ CI} = .21 - .36, p < .01$ ) or when three studies with an extremely large number of participants (Covitt, 2002; Komro et al., 2008; Luo, Shi, Zhang, Liu, Li, Rozelle, & Sharbono, 2011) were removed from the analysis ( $k = 46, \text{Mean(ES)} = .35, 95\% \text{ CI} = .22 - .49, p < .01$ ). Further, no moderation was found when comparing: published and unpublished studies ( $pdiff = .18$ ), studies that were published before 2001 and during or after 2001 ( $pdiff = .34$ ), studies that did randomly assign community service to participants and studies that did not this ( $pdiff = .95$ ), intervention and non-intervention studies ( $pdiff = .75$ ), studies in which the period between pre-test and post-test was more than one year and studies in which this period was less than one year ( $pdiff = .51$ ), and studies that used self-reports and studies that used a combination of self-reports and other-reports ( $pdiff = .75$ ).

### Moderation Effects of Reflection Characteristics: Comparing Community Service With and Without Reflection.

The column “studies including reflection” of Table 1 presents the mean ESs and 95% CIs for the overall, aggregated outcome and each outcome category for studies including reflection. As presented in Table 2, the overall community service effect was: Mean ES = .41 (95% CI = .27 – .56,  $p < .01$ ). For studies in which participants did not use reflection, no overall (aggregated) effect of community service was found (Mean ES = .05, 95% CI = -.24 – .35,  $p = .72$ ).

Table 1  
Mean Effect Sizes of Community Service on Adolescent Outcomes

| Outcome                         | All studies |         |            | Studies including reflection |         |            |
|---------------------------------|-------------|---------|------------|------------------------------|---------|------------|
|                                 | k           | Mean ES | 95% CI     | k                            | Mean ES | 95% CI     |
| Overall                         | 49          | .33**   | .22 – .45  | 34                           | .41**   | .25 – .57  |
| Academic content and competence | 11          | .45**   | .22 – .68  | 9                            | .55**   | .30 – .81  |
| Academic and career attitudes   | 14          | .20(*)  | -.03 – .42 | 10                           | .36*    | .08 – .63  |
| Personal and social competence  | 23          | .25**   | .11 – .39  | 16                           | .34**   | .12 – .55  |
| Attitudes toward the self       | 15          | .36*    | .04 – .69  | 11                           | .41(*)  | -.03 – .85 |
| Attitudes towards others        | 22          | .32**   | .12 – .52  | 15                           | .41**   | .13 – .68  |
| Civic competence                | 12          | .35**   | .19 – .50  | 8                            | .40**   | .20 – .60  |
| Civic attitudes                 | 22          | .34*    | .04 – .64  | 17                           | .40*    | 0 – .79    |

Note. k = number of studies included; Mean ES = mean effect size; CI = confidence interval.

(\*)  $p < .09$ . \* $<.05$ . \*\*  $<.01$ .

Table 2 also presents the moderation effects of the specific reflection characteristics we examined. For a number of reflection-characteristics, we found significant, positive moderation effect when comparing studies that included these reflection characteristics with studies that did not include reflection at all. With regard to the *quantity of reflection*, we found a significant, positive relation between the frequency of reflection and the effect of community service. Further, a stronger overall community service effect was found when studies included regular reflection (reflection both before, during, and after community service) or included reflection only during or after community service. Further, the *form of reflection* and the *social context of reflection* yielded significant moderation effects. We found positive effects for each form and each social context of reflection, except for reading on the topic of the community service activity (this moderator yielded a marginally significant, positive effect), using discussion as a reflection form, and for using a combination of writing, talking and using artistic or non-verbal forms of reflection. Further, the *content of reflection* yielded significant moderation effects. Positive effects were found for each content of reflection, except for reflection on self-related attitudes, social attitudes, and civic competence, and for the combination of self-related, social, and civic attitudes (this moderator yielded a marginally significant, positive effect). Further, a stronger overall effect was found for studies in which there was a match

between the reflection- and outcome category. Lastly, no moderation effect was found for the overall quality of reflection.

Table 2  
Moderation by Reflection Characteristics: Comparisons Between Studies That do and do not Include Reflection

| Moderator                            | Reflection |         |           | No Reflection |         |            | pdiff |
|--------------------------------------|------------|---------|-----------|---------------|---------|------------|-------|
|                                      | k          | Mean ES | 95% CI    | k             | Mean ES | 95% CI     |       |
| Reflection                           | 34         | .41**   | .27 – .56 | 8             | .05     | -.24 – .35 | <.05  |
| <i>Quantity of reflection</i>        |            |         |           |               |         |            |       |
| Frequency of reflection <sup>a</sup> | 21         |         |           |               |         |            | <.01  |
| Regularity of reflection             | 11         | .26**   | .16 – .36 | 8             | .06     | -.06 – .18 | <.05  |
| Before community service             | 12         | .43**   | .14 – .73 | 8             | .05     | -.31 – .42 | .11   |
| During community service             | 22         | .45**   | .24 – .65 | 8             | .05     | -.28 – .39 | .05   |
| After community service              | 19         | .34**   | .22 – .46 | 8             | .06     | -.13 – .25 | <.05  |
| <i>Form of reflection</i>            |            |         |           |               |         |            |       |
| Journal                              | 17         | .24**   | .15 – .34 | 8             | .06     | -.08 – .20 | <.05  |
| Discussion                           | 22         | .38**   | .19 – .58 | 8             | .05     | -.27 – .38 | .09   |
| Presentation                         | 9          | .29**   | .16 – .43 | 8             | .06     | -.09 – .20 | <.05  |
| Reading                              | 8          | .38**   | .14 – .62 | 8             | .06     | -.18 – .29 | .06   |
| Writing an essay                     | 8          | .36**   | .23 – .49 | 8             | .06     | -.07 – .19 | <.01  |
| Creative way                         | 6          | .30**   | .12 – .47 | 8             | .06     | -.09 – .21 | <.05  |
| Write, talk, and other way           | 8          | .21**   | .06 – .36 | 8             | .06     | -.09 – .21 | .10   |
| <i>Context of reflection</i>         |            |         |           |               |         |            |       |
| Individually                         | 14         | .24**   | .14 – .35 | 8             | .06     | -.08 – .20 | <.05  |
| Small peer group (N = 2-5)           | 8          | .36**   | .18 – .54 | 8             | .06     | -.12 – .24 | <.05  |
| Large peer group (N = 6-10)          | 8          | .33**   | .20 – .47 | 8             | .06     | -.08 – .19 | <.01  |
| Classroom                            | 19         | .47**   | .24 – .70 | 8             | .05     | -.29 – .40 | <.05  |
| With teacher/supervisor              | 17         | .38**   | .24 – .53 | 8             | .06     | -.16 – .27 | <.05  |
| With others                          | 24         | .47**   | .27 – .66 | 8             | .05     | -.28 – .38 | <.05  |
| <i>Content of reflection</i>         |            |         |           |               |         |            |       |
| Academic and career attitudes        | 8          | .31**   | .15 – .46 | 8             | .06     | -.09 – .21 | <.05  |
| Self and social competence/behavior  | 16         | .32**   | .20 – .45 | 8             | .06     | -.12 – .24 | <.05  |
| Self-related attitudes               | 15         | .41**   | .16 – .67 | 8             | .05     | -.30 – .40 | .11   |
| Social attitudes                     | 15         | .42**   | .17 – .67 | 8             | .05     | -.29 – .40 | .10   |

|   |    |       |           |   |     |            |      |
|---|----|-------|-----------|---|-----|------------|------|
| Civic competence/<br>behavior                               | 16 | .37** | .12 – .62 | 8 | .05 | -.30 – .41 | .15  |
| Civic attitudes   | 12 | .25** | .13 – .36 | 8 | .06 | -.08 – .20 | <.05 |
| Self-, and other-, and<br>civic- related attitudes          | 8  | .25** | .11 – .39 | 8 | .06 | -.08 – .20 | .06  |
| Match between<br>reflection and outcome<br>content-category | 9  | .59** | .23 – .95 | 8 | .05 | -.33 – .43 | <.05 |
| Quality of reflection                                       | 8  | .23** | .10 – .36 | 8 | .06 | -.07 – .19 | .07  |

Note. *k* = number of studies included; Mean ES = mean effect size; CI = confidence interval; *pdiff* = significance of moderation effect.

<sup>a</sup> The frequency of reflection was used as a continuous variable:  $b(SE) = .01(0)$ ; 95%CI = .01 - .02;  $\beta = .60$ .  
\*\*  $p < .01$ .

### Moderation by Reflection Characteristics: Comparisons Among Reflection Characteristics.

In contrast to the before mentioned moderation effects, only a few moderation effects were found when comparing one aspect of a reflection-category with other aspects of the reflection-category. For the moderation effects that could be examined (for 17 of the 28 reflection characteristics enough studies for each level of the moderator were included)<sup>2</sup>, we found a significant, positive effect for the frequency of reflection ( $k = 21$ ,  $b(SE) = .01(0)$ , 95%CI = 0 – .02,  $\beta = .54$ ,  $p < .01$ ) and a marginally significant, positive effect for reflection on academic content and competence-related topics (present:  $k = 6$ , Mean ES = .50, 95% CI = .28 – .72,  $p < .01$ ; absent:  $k = 10$ , Mean ES = .24, 95%CI = .07 – .41,  $p < .01$ ; *pdiff* = .06).

### Moderation by (Other) Community Service Characteristics

As presented in Table 3, a significant, positive correlation was found between the quantity of community service (community service hours) and the overall community service effect. Linearity represented the shape of the relation between the quantity of community service and community service effects most accurately ( $F(1,24) = 3.75$ ,  $p = .07$ ). The larger the number of community service hours (range from 1 – 180 hours of service), the larger was the impact of community service on adolescents. The kind of community service did not moderate the overall community service effect (service for vulnerable group in need of that service present:  $k = 23$ , Mean ES = .44, 95% CI = .23 – .65,  $p < .01$ ; absent:  $k = 7$ , Mean ES = .23, 95% CI = -.15 – .61,  $p = .23$ ; *pdiff* = .34).

<sup>2</sup> This is equal to 61% of the studies. The effects of the following moderators could not be examined because cell sizes were too small: reflection during community service (*quantity of reflection*.); discussion (*form of reflection*); individual reflection, classroom reflection, reflection with teacher/supervisor, reflection with others (*context of reflection*); all of the content-related reflection aspects (*content of reflection*), except for reflection on academic content and academic attitudes, and for the match between the content of the reflection and outcome category.

### Moderation by Person Characteristics

In Table 3 it is also shown that adolescents' age, but not adolescents' sex moderated the service effect. Age was positively related to the overall community service effect: studies with older adolescents found stronger community service effects.<sup>3</sup>

Table 3

Moderation by Community Service Characteristics and Person Characteristics

| (Continuous) moderators               | k  | b (SE)     | 95% CI     | $\beta$ | p    |
|---------------------------------------|----|------------|------------|---------|------|
| Quantity of community service (hours) | 26 | .00 (0)    | 0 – .01    | .37     | .05  |
| Age                                   | 40 | .07 (.03)  | .01 – .12  | .37     | <.01 |
| Sex (percentage of boys)              | 33 | -.09 (.05) | -.20 – .02 | -.27    | .11  |

Note. k = number of studies included; CI = confidence interval; p = significance of the moderation effect.

### Correlations and Interaction Between Moderation Effects

The community service and adolescent characteristics that moderated community service effects (reflection or not; quantity of reflection, quantity of community service, and age) were uncorrelated (correlations ranged from  $r = -.21$  to  $r = .02$  and were all non-significant), which indicates that these moderators had a unique contribution to the overall community service effect. Further, when these moderators were simultaneously regressed on the overall community service effect, we found the strongest effect for the quantity of reflection ( $\beta = .50 - .70$ ), the second strongest effect for age ( $\beta = .36 - .50$ ), and the least strong effect for the quantity of community service ( $\beta = .23 - .35$ ). We also found a positive, significant interaction between the quantity of reflection and the quantity of community service ( $k = 13$ ,  $b(SE) = 0(0)$ ,  $95\%CI = 0 - 0$ ,  $\beta = .62$ ,  $p < .01$ ).<sup>2</sup> As visually presented in Figure 1, this means that the positive impact of the number of community service hours on the effect of community service increased when adolescents reflected more frequently. No other interactions between the examined moderators were found.

<sup>3</sup> This interaction effect was found for studies that all included reflection. A similar effect was found when also studies that did not include reflection (score "0" on the frequency of reflection) were included: ( $k = 13$ ,  $b(SE) = 0(0)$ ,  $95\%CI = 0 - 0$ ,  $\beta = .52$ ,  $p < .01$ ).

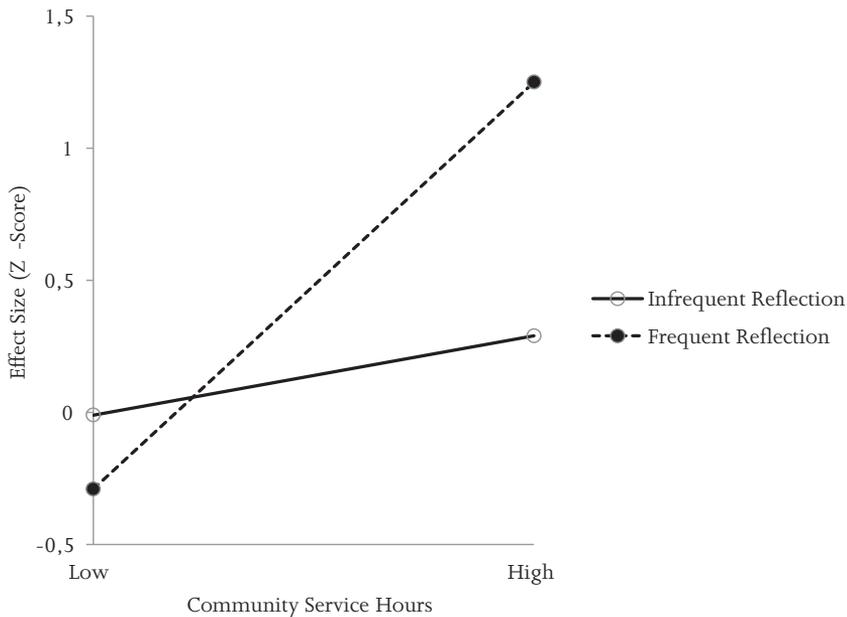


Figure 1. Interaction between the quantity of community service and the quantity of reflection in relation to the overall effect size. The graph shows the overall effect size for studies with low (−1 SD) and high (+1 SD) hours of community service depending on low (−1 SD), and high (+1 SD) frequency of reflection.

## DISCUSSION

In the current meta-analysis, we examined the impact of community service on adolescents' development and the moderating effects of reflection-, community service-, and adolescents' characteristics. Community service with reflection had robust, positive effects on adolescents' development. The overall effect of community service was only found when service included reflection. This effect was stronger when reflection was performed more frequently, service was performed more often, and when adolescents were older.

### Effects of Community Service and Moderation by Reflection

Community service had small to moderate positive effects on competence- and attitude-related outcomes in all examined outcome domains: the academic, personal, social, and civic domain, as well as on the overall (aggregated) outcome. Further, our findings suggest that these effects cannot be explained by methodological artifacts or by study characteristics, such as time interval between measurements or publication bias.

Our findings also indicate that the overall positive effect of community service requires reflection, as we found that there is no effect when adolescents do not reflect on their

community service or service related topics. Why does reflection have this effect? To get a better understanding of the most effective reflection activities we examined the moderation effects of specific reflection characteristics including the *quantity of reflection*, the *form of reflection*, the *social context of reflection*, the *content of reflection*, and the *overall quality of reflection*. The majority of these reflection characteristics were associated with a larger overall effect.

Important reflection-moderators were the frequency of reflection and reflection on academic content and competence, as they were also associated with a larger overall effect when comparisons between reflection characteristics were made. First, we found a moderation effect for the frequency of reflection (an element of the *quantity of reflection*): reflecting more often on community service experiences or related topics increased the overall impact of community service (e.g., Billig, 2009; Blyth et al., 1997; Scales et al., 2000). Reflecting more frequently could be important for effective community service as it can help to process service experiences more thoroughly (e.g., Eyler, 2002), which may optimize learning effects.

Second, we found that reflecting on academic content and competence (an element of the *content of reflection*) stimulated the overall impact of community service on adolescents' development. One explanation for this effect could be that reflection on academic content (topics taught in school courses) often involves thinking about topics that have a strong and specific connection to the community service that is performed. For example, in a study by Moss (2009), adolescents reflected on various aspects (e.g., historical and political aspects) of the Vietnam War and on World War II in a history-course, before they made an oral history archive out of personal interviews with war-veterans. This archive was used to preserve oral history of civic issues and was available as material for courses on (civic) history in a nearby university. In this example there was a direct link between the content of the reflection and the community service performed, which may have stimulated adolescents' understanding and generalization of both the service experience (e.g., understanding these personal war stories in their historical and political context), as well as the concepts connected to these experiences (e.g., being better able to remember and understand the various aspects of these wars; Eyler, 2002; Hatcher et al., 2004; Ogden & Clause, 2006).

### **Moderation by (other) Community Service Characteristics**

The *quantity of community service* moderated the overall service effect: adolescents profited more from community service when it was performed more frequently (e.g., Billig, 2009; Hecht, 2003; Melchior & Bailis, 2002). We did not find any indication for a cut-off point at which the benefits of community service may level off or become counterproductive (e.g., Conway et al., 2009). The positive effect of community service even seemed to last up until 180 hours of service, which is equal to 4,5 weeks of service.

Whether the community service involved having personal contact with vulnerable service groups in need of that service did not moderate the intervention effect. Based on the literature, three explanations for this finding are plausible. First, it could be that although some (types of) adolescents may benefit and learn from these kinds of community service, others may

not, for example because they are overwhelmed or discouraged by these experiences (e.g., have a low sense of civic-efficacy or believe that little positive change is possible; cf. Kahne & Westheimer, 2006; Karafantis & Levy, 2004). Second, it could be that service for vulnerable groups in need has no overall positive effect, but only has positive effects for specific outcome domains. Based on for example the ideas of McLellan & Youniss (2003) and Reinders & Youniss (2006), this kind of service may be most strongly related to outcomes in the social and civic domain. This could be because personal experiences with people in a state of need may especially change adolescents' civic responsibility, their relation to other groups of people and to society (e.g., reflection on stereotypes and social justice), and (as a consequence) their civic engagement. Third, it could be that influential kinds of community service with vulnerable groups require even more detailed characteristics than we studied. For example, it may not be sufficient that service groups are factually vulnerable and in need of service; adolescents should also have the (subjective) experience that this is the case (cf. Furco, 2002) and/or feel they make a positive contribution with their service activity (cf. Furco, 2002; Root & Billig, 2008). It could therefore be valuable for future studies to further explore the (proposed) processes and factors that may explain this finding.

### **Moderation by Person Characteristics**

We found a positive moderation effect of age, which suggests that community service has a stronger effect when adolescents are older. This has also been found in some earlier studies on community service effects (e.g., Hecht, 2003; Melchior & Bailis, 2002) and is in line with current knowledge on cognitive, moral, and identity development. When adolescents become older they are better able to process and integrate new experiences (e.g., identity integration, van Hoof & Raaijmakers, 2002), consider and value the perspectives and needs of others (e.g., Eisenberg et al., 2005), and further develop their civic identities (e.g., Youniss et al., 1997): all factors that could make adolescents more open and susceptible to community service experiences. Adolescents' sex did not moderate the overall community service effect. This indicates that, generally, community service is as effective for boys as it is for girls.

We found that more frequent community service and more frequent reflection reinforced each other's impact on the overall community service effect. This suggests that adolescents learn even more from intensive service experiences when accompanied with more frequent reflection, as it may allow them to process the content and meaning of these experiences more thoroughly (cf. Blyth et al., 1997).

### **Strengths, Limitations and Future Research**

This study has three major strengths: first, this meta-analysis only includes studies that contained a treatment and control group with pre- and post- assessments, which enables making causal inferences on community service effects. Second, this study was the first meta-analysis that thoroughly examined whether and how specific characteristics of reflection affected community service effects. This was enabled by the acquisition of additional information on these reflection characteristics from the study-authors. Third, it is one of the few studies that examined whether other, theoretically relevant community service characteristics and person

characteristics affected community service effects and whether these characteristics interacted with reflection. Together these findings contribute to a better understanding of the conditions and processes by which community service affects adolescents' development.

Although we were able to examine relatively specific community service effects and moderator effects, the meta-analytic approach entails certain limitations. The number of studies with specific combinations of characteristics is limited, as is the information on the specifics of services and participants. For example, we were not able to assess in more detail which adolescents profit most from which kind of community service (e.g., serving a vulnerable service group). Therefore, moderator analyses were limited to those aspects of the moderator for which sufficient information was provided in a sufficient number of studies (Lipsey & Wilson, 2001). This also prevented examining moderation effects for specific outcome domains, including the examination of whether community service for vulnerable service groups may only have positive effects for specific outcomes such as social and civic outcomes (McLellan & Youniss, 2003; Reinders & Youniss, 2006).

Another limitation of this study is that even though we can make causal inferences on the main effect of community service, it does not allow making causal inferences on the moderation effects of (specific) community service or reflection characteristics because these characteristics were not experimentally manipulated. To gain more detailed insight into effective ingredients of community service, research could benefit from using more experimental designs to manipulate specific elements of service interventions. This is also important as we found that most of the included studies used numerous kinds of reflection simultaneously. This makes assessing differences between effects of specific kinds of reflection hard, or sometimes even impossible (for 39 % of the assessed reflection characteristics less than 4 studies did not include the assessed reflection characteristic, which prevented calculating its moderation effect).

In addition to using more experimental designs, using more long-term longitudinal research designs could further improve knowledge on the stability or growth of community service effects (e.g., Celio et al., 2011; Hart et al., 2008). In this meta-analysis, only four studies examined the effect of community service on adolescents' development over a period of more than one year. By implementing more long-term studies, a better understanding can be obtained of how community service affects adolescents over time and whether community service and reflection has a lasting effect.

Further, the validity of community service research could be improved by including more objective measures of service effects (e.g., Celio et al., 2011). In our meta-analysis 80 % of the studies solely used self-report measures. Although self-reports are valid ways to assess thoughts and experiences among adolescents (e.g., Hart & Carlo, 2005), they can also be influenced by social-desirability (e.g., Moely et al., 2002). This can especially be a problem in community service research, as doing service is generally perceived as positive (cf. Hart, Matsuba, & Atkins, in press): service is an important societal value, which may give rise to

personal and social expectations of performing community service.

Adding more objective measures, especially for the behavioral and competence related outcomes of community service, would be a valuable addition to present studies on service effects. These more objective measures could include: competence and behavioral measures (e.g., school grades or counts of signing up for community service activities), observations, and relatively independent reports on adolescents' behaviors (preferably by persons who are not involved in, or aware of the community service intervention; e.g., Celio et al., 2011).

### General Conclusion and Implications

This meta-analysis shows that community service including reflection has positive effects on adolescents' development in essential life-domains; on the way adolescents behave and think about school, themselves, others, and society. These findings are promising for educators and practitioners who implement community service in adolescent populations as they indicate that community service could be a valuable contribution to adolescents' development. Further, our findings contribute to a better understanding of what constitutes effective community service which can be used to improve the efficacy of community service interventions.

| Appendix A<br>Coding Scheme for the Studied Variables |   |    |    |    |      |
|---|---|----|----|----|------|
| Variable  | Description   | k  |    |    | Type |
|   |   | C1 | C2 | C3 |      |
| <b>General variables</b>                              |   |    |    |    |      |
| Author, title   |   |    |    |    | desc |
| Year of report  | 1 = published between 1980 and 2000;<br>2 = published between 2001 and 2012   | 25 | 24 |    | cat  |
| Type of report  | 1 = published (journal articles and books);<br>2 = unpublished (e.g., dissertation)   | 33 | 16 |    | cat  |
| Randomization   | Random assignment to community service:<br>yes = 1; no (e.g., post-hoc matching) = 2  | 14 | 24 |    | cat  |
| Intervention  | Community service as an intervention:<br>yes = 1; no = 2  | 42 | 6  |    | cat  |
| Mandatory service                                     | Community service mandatory: 1 = yes; 2 = no  | 27 | 14 |    | cat  |
| Study period  | Time between pre- and post-test:<br>1 = within one year; 2 = more than one year   | 42 | 4  |    | cat  |
| Measure   | Kind of measures used: 1 = self-reports;<br>2 = combination of self-reports and reports<br>by other sources (e.g., teacher reports, school<br>records). | 39 | 10 |    | cat  |
| <b>Sample variables</b>                               |   |    |    |    |      |
| Sample size   | Size of study sample (total sample size = 24477)  | 49 |    |    | cnt  |
| Country   | Continent or country in which study was<br>performed: 1 = USA; 2 = other (e.g., Europe)   | 41 | 6  |    | cat  |

|                               |   |    |    |    |     |
|-------------------------------|---|----|----|----|-----|
| SES                           | Socio-economic status of study sample as indicated by the author: 1 = low-class; 2 = middle-class; 3 = high-class   | 5  | 3  | 0  | cat |
| Population                    | Ethnic population of study sample: 1 = majority population; 2 = minority population; 3 = mixed population of majority and minority participants   | 11 | 10 | 15 | cat |
| <b>Moderation variables</b>   |   |    |    |    |     |
| Reflection                    | Adolescents are actively involved in structured reflection activities: yes = 1; no = 2  | 34 | 8  |    | cat |
| <b>Quantity of reflection</b> |   |    |    |    |     |
| Frequency of reflection       | The number of times that participants reflect. One classroom lesson is one time of reflection   | 21 |    |    | cnt |
| Regularity of reflection      | Reflection before, during, and after community service: yes = 1; no = 2   | 11 | 22 |    | cat |
| Before community service      | Reflection before, community service: yes = 1; no = 2   | 12 | 21 |    | cat |
| During community service      | Reflection during community service: yes = 1; no = 2  | 22 | 11 |    | cat |
| After community service       | Reflection after community service: yes = 1; no = 2   | 19 | 14 |    | cat |
| <b>Form of reflection</b>     |   |    |    |    |     |
| Journal                       | Reflection by writing in a journal: yes = 1; no = 2   | 17 | 12 |    | cat |
| Discussion                    | Reflection by discussion: yes = 1; no = 2   | 22 | 8  |    | cat |
| Presentation                  | Reflection by making a presentation: yes = 1; no = 2  | 9  | 17 |    | cat |
| Reading                       | Reflection by reading on the topic of community service activity: yes = 1; no = 2   | 8  | 16 |    | cat |
| Writing an essay              | Reflection by writing an essay: yes = 1; no = 2   | 8  | 14 |    | cat |
| Creative way                  | Reflection by using a creative way of reflection (e.g., art work): 1 = yes; 2 = no  | 6  | 14 |    | cat |
| Write, talk, and other way    | Write (essay and/or journal), talk (discussion and/or presentation), and use another form of reflection (reading about the topic community service and/or creative reflection-form, e.g., making a poster): 1 = yes; 2 = no | 8  | 17 |    | cat |
| <b>Context of reflection</b>  |   |    |    |    |     |
| Individually                  | Individual reflection (private reflection): 1 = yes; 2 = no   | 14 | 10 |    | cat |
| Small peer group              | Reflection within a small peer group (N = 2-5): 1 = yes; 2 = no   | 8  | 14 |    | cat |
| Large peer group              | Reflection within a large peer group (N = 5-10): 1 = yes; 2 = no  | 8  | 13 |    | cat |
| Classroom                     | Reflection within the classroom: 1 = yes; 2 = no  | 19 | 10 |    | cat |

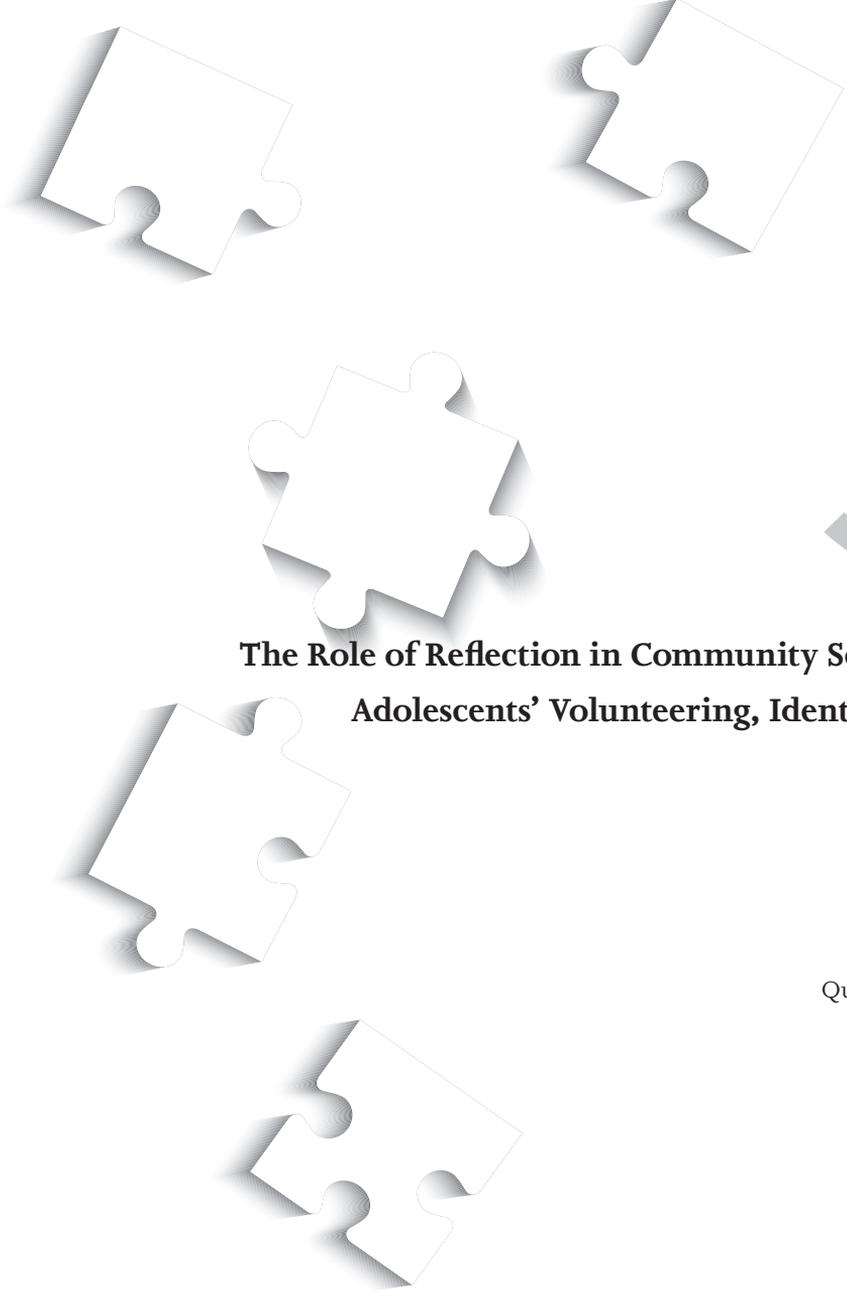
|   |  |    |    |     |
|---|--|----|----|-----|
| With teacher/<br>supervisor                                     | Reflection with teacher or supervisor:<br>1 = yes; 2 = no  | 17 | 9  | cat |
| With others   | Reflection with others (peer group, classroom,<br>teacher or supervisor): 1 = yes; 2 = no  | 24 | 1  | cat |
| <i>Content of reflection</i>                                    |  |    |    |     |
| Academic content<br>and competence                              | Academic content of a certain academic topic<br>and academic competence: 1 = yes; 2 = no   | 6  | 18 | cat |
| Academic and career<br>attitudes                                | Academic or career-related motivations,<br>attitudes, and engagement, enjoyment of the<br>course: 1 = yes; 2 = no  | 8  | 17 | cat |
| Self/social<br>competence                                       | Social and personal: efficacy, abilities, skills:<br>1 = yes; 2 = no   | 16 | 9  | cat |
| Self-related attitudes  | Personal and self(related): concept, attitudes,<br>preferences, experiences, motivations, well-<br>being: 1 = yes; 2 = no  | 15 | 11 | cat |
| Social attitudes  | Other-, societal-, justice related: values, ideas,<br>reasoning, understanding: 1 = yes; 2 = no  | 15 | 11 | cat |
| Civic competence  | Community service, civic participation, and<br>voting: behavior: 1 = yes; 2 = no   | 16 | 10 | cat |
| Civic attitudes   | Community service, civic participation, voting:<br>intentions and evaluations: 1 = yes; 2 = no   | 12 | 11 | cat |
| Self-related, and<br>social- and civic-<br>attitudes            | Reflection on self-related attitudes, social<br>attitudes, and civic-related attitudes: 1 = yes;<br>2 = no   | 8  | 15 | cat |
| Match between<br>reflection and<br>outcome content-<br>category | Category of the reflection content(s) and<br>outcome content(s) are equal (100%): 1 = yes;<br>2 = no   | 9  | 19 | cat |
| Quality of reflection   | Regular reflection ( <i>quantity of reflection</i> ) &<br>reflection by writing, talking, and using<br>another way of reflection ( <i>form of reflection</i> ) &<br>reflection on self-, and other-, and civic-related<br>attitudes: 1 = yes; 2 = no | 8  | 21 | cat |
| <i>Kind of service</i>  |  |    |    |     |
| Vulnerable service<br>group                                     | Community service directed to people who are<br>vulnerable or weak (e.g., children, homeless<br>people, seniors): 1 = yes; 2 = no  | 25 | 8  | cat |
| Community service<br>that is needed                             | Community service is important for others'<br>emotional or physical well-being (e.g.,<br>providing food, housing, and support): 1 = yes;<br>2 = no (e.g., functionary work)  | 25 | 7  | cat |
| Personal contact with<br>service group                          | Community service involves having direct,<br>personal contact with the people one provides<br>community service for: 1 = yes; 2 = no   | 20 | 0  | cat |
| <i>Quantity of community service</i>                            |  |    |    |     |
| Hours   | Average number of community service hours<br>( $M = 65.79$ ; $SD = 51,31$ )  |    |    | cnt |

|                          |   |    |    |   |     |
|--------------------------|---|----|----|---|-----|
| Week                     | Average number of community service weeks<br>( $M = 28,50$ ; $SD = 25,32$ )   |    |    |   | cnt |
| Blocks                   | Number of concentrated blocks of time in which community service is performed:<br>1 = one block; 2 = two blocks; 3 = three blocks | 5  | 3  | 1 | cat |
| Age                      | Adolescents' mean age ( $M = 14,92$ ; $SD = 1.92$ )   | 40 |    |   | cnt |
| Sex                      | Percentage of boys included in the study  | 9  | 15 |   | rnk |
| <b>Outcome variables</b> |   |    |    |   |     |
| Academic competence      | Knowledge/GPA/grades/cognitive outcomes, academic competencies: 1 = yes; 2 = no   | 11 | 38 |   | cat |
| Academic attitudes       | Academic motivations, attitudes, and engagement, enjoyment of the course: 1 = yes; 2 = no   | 14 | 35 |   | cat |
| Self/social competence   | Social and personal: efficacy, abilities, skills: 1 = yes; 2 = no   | 23 | 26 |   | cat |
| Self-related attitudes   | Personal and self(related): concept, attitudes, preferences, motivations, well-being: 1 = yes; 2 = no                             | 15 | 34 |   | cat |
| Social attitudes         | Other-, societal-, justice related: values, ideas, reasoning, understanding: 1 = yes; 2 = no                                      | 22 | 27 |   | cat |
| Civic competence         | Community service, civic participation, voting: <u>behavior</u> : 1 = yes; 2 = no   | 12 | 37 |   | cat |
| Civic attitudes          | Community service, civic participation, voting: <u>intentions and evaluations</u> : 1 = yes; 2 = no                               | 22 | 25 |   | cat |

Note. k = number of studies included; C1-C3 = coding category 1-3; desc = descriptive variable; cnt = count variable; cat = categorical variable; rnk = rank order variable.







# 5

## **The Role of Reflection in Community Service: Effects on Adolescents' Volunteering, Identity, and Morality**

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## ABSTRACT

This study examined the role of reflection in community service. Three groups of adolescents ( $N = 458$ ; 45.2 % female;  $M$  age = 15.70) were compared: (1) a control group, and two community service groups that were randomly assigned to (2) community service with a reflection intervention or to (3) community service only. Adolescents' volunteering, identity, and morality were assessed before and after community service. Community service groups volunteered more often than the control group, suggesting that this effect is due to community service experiences. Further, we found a tendency for reflection to strengthen this effect. Groups did not differ in identity and morality. We found that the reflection intervention may affect the relation between adolescents' volunteering and identity.

## INTRODUCTION

Whether adolescents become civically engaged partly depends on whether they receive the proper opportunities to do so. These opportunities may involve interventions that aim to promote civic engagement, such as school-organized volunteering, better known as school-organized service learning or *community service* (e.g., National Center for Education Statistics, n.d.): organized, unpaid activities that are intended to benefit the environment, individuals, groups of people or society (cf. van Goethem et al., 2012). Community service is often used as a relatively cost-effective intervention, as it requires few resources and benefits both the community in which the service occurs (e.g., Melchior, 1998) and the adolescents who perform the service activities. For example, research evidence has shown that performing community service can deepen adolescents' academic, personal, social, and civic development (cf. Conway, Amel, & Gerwien, 2009; van Goethem, van Hoof, Orobio de Castro, van Aken, & Hart, 2013). There is also evidence suggesting that community service requires *reflection* to be effective. A meta-analysis of 49 studies by van Goethem et al. (2013) showed that community service had a (aggregated) positive effect on adolescents only when combined with reflection.

### The current study

Although research suggests that reflection is important for beneficial community service effects, until now the importance of reflection for service benefits has not been established directly. To our knowledge no study randomly allocated reflection to the community service intervention. The first aim of this paper is therefore to examine the impact of reflection on community service effects. With this aim, schools randomly assigned adolescents who performed community service to a group who received a reflection intervention or to a group who received no reflection intervention. We compared these groups on their volunteering behavior, identity, and morality. Further, we included a group of adolescents who did not perform community service nor received the reflection intervention as an additional comparison group (the control group). This way we could determine which aspect of the community service intervention caused any effects: the reflection, or (elements of) the community service, or both. We

hypothesized that the combination of community service and reflection would have strongest effects on volunteering, identity, and morality.

The *second aim* of this paper is to gain knowledge on the kinds of reflection that influence service effects. With this aim, we examined whether adolescents' volunteering, identity, morality, and the interrelations of these outcomes were affected by adolescents' reflection on the civic, identity, and moral aspects of their community service experiences and the larger context of these experiences. We hypothesized that these kinds of reflection would have positive effects on these outcomes. Additionally, we examined whether more intensive community service and reflection strengthened community service and reflection effects.

### **The effect of community service and reflection on adolescents' volunteering, identity, and morality**

During community service, adolescents have various experiences that could stimulate their volunteering, moral development, and identity development (see for example the model of Matsuba, Hart, & Atkins, 2007). Further, research suggests that the impact of community service on these outcomes may be intensified when adolescents reflect on the civic, moral, and identity aspects of their community service and the larger context of these experiences (e.g., Ogden & Claus, 2006). This is also in accordance with the idea that strongest effects may be established when the content of the reflection activity matches the content of the outcome category (e.g., Lemming, 2001; cf. Waterman, 1997).

First, community service is expected to stimulate adolescents' volunteering behavior: adolescents become not only more likely to volunteer (e.g., Bekkers, Spenklink, Ooms, & Immerzeel, 2010; Melchior, 1998), but they also volunteer more often (Melchior, 1998). Community service experiences could for example stimulate adolescents' civic behavior by positively affecting adolescents' civic attitudes. Performing community service can make adolescents feel more connected to society and can teach them the importance of being civically engaged (e.g., Kahne, Chi, & Middaugh, 2006). These effects could be further stimulated by reflection on the civic aspects of the community service and its wider contexts, referred to as "civic reflection". It for example includes reflection on the importance of performing community service and being civically engaged (cf. Ogden & Claus, 2006).

Second, adolescents' identity development could be stimulated through community service because adolescents can learn about themselves through these service experiences. Community service is often a new experience for adolescents: new situations, behaviors, and activities can be explored and learned (e.g., Hansen, Larson, & Dworkin, 2003). Further, adolescents often engage and interact with new (groups of) people who can introduce them to new ideas and can challenge their pre-existing ideas (e.g., Bowman, 2011; Bringle & Hatcher, 1999; see Hart, Matsuba, & Atkins, 2008). As a consequence, the way adolescents think or feel about themselves may be altered or questioned, which is often referred to as "identity exploration" (e.g., Furco, 2002). These alterations can also occur in the content, salience, or relative importance of some of adolescents' context-specific identities (cf. Crocetti, Jahromi, & Meeus,

2012; van Hoof & Raaijmakers, 2003). Context-specific identities involve the way adolescents see themselves in different, personally relevant situations and contexts, such as at school, at home, or during their leisure time (van Hoof & Raaijmakers, 2002, 2003). Changes in these context-specific identities challenges adolescents' *identity integration*: the feeling of being the same person over time and over different situations and contexts (van Hoof & Raaijmakers, 2002). Further, these challenges and changes to adolescents' identity could be stimulated by reflecting on the identity-related aspects of their community service and its wider contexts, which may trigger in depth identity exploration (Crocetti et al., 2012; see Meeus, van de Schoot, Keijsers, Schwartz, & Branje, 2010). This "identity-reflection" for example includes reflecting on their behaviors, capacities, preferences, and on what they have learned about themselves during community service (e.g., Ash, Clayton, & Atkinson, 2005).

Third, research suggests that performing community service may stimulate adolescents' moral development (e.g., Conrad & Hedin, 1982; Furco, 2002; Patro, 1999). First of all, because adolescents may internalize the moral values that underlie performing community service: as something which (is intended to) benefit(s) others' welfare or the common good (e.g., Metzger & Smetana, 2009). Another reason is that community service can confront adolescents with civic and moral values and issues in society, such as inequality or discrimination. This can for example increase adolescents' understanding of these issues (e.g., Lee, Olszewski-Kubilius, Donahue, & Weimholt, 2007; van Goethem et al., 2012), increase adolescents' connectedness to the community, and increase their moral commitment (e.g., Bowman, 2011). Moral commitment involves feeling personally responsible for others' welfare and rights and feeling committed to act accordingly (e.g., Raaijmakers & van Hoof, 2006; van Goethem et al., 2012).

Adolescents' reflection on the moral aspects of their community service, referred to as "moral reflection", may stimulate their moral development (cf. Lemming, 2001). Moral reflection for example involves reflection on the moral values underlying adolescents' community service, such as how their volunteering activities help other people. It may also involve reflection on (their commitment to) moral issues in society and their community service such as inequality (for example, when performing community service for others who are deprived of primary resources; Billig & Weah, 2008).

### **The effect of community service and reflection on *the relation between adolescents' volunteering, identity, and morality***

In addition to the direct effects of community service and reflection, community service and reflection may also have indirect effects on adolescents' volunteering, identity, or morality. Changes in one of these outcomes may cause changes in the other outcomes. Indication for this process is provided by the fact that adolescents' volunteering, identity, and morality are often found to be interrelated (e.g., Matsuba et al., 2007; van Goethem et al., 2012). In accordance with a study of van Goethem et al. (2012), this may especially apply to the association between adolescents' morality and identity and between adolescents' identity and volunteering. With regard to the latter, it was found that adolescents with a relatively less highly integrated identity volunteered more often. This could mean that a larger time investment in volunteering can

lead to an imbalance in the integration of all personally relevant context-specific identities (e.g., van Hoof & Raaijmakers, 2003). Alternatively or additionally, it could be the case that a relatively less high identity integration is a sign of identity exploration which is related to being more open to new experiences such as volunteering (see van Goethem et al., 2012).

Further, the associations that exist between adolescents' volunteering, identity, and morality may become stronger through reflection (e.g., Lee et al., 1999). Moreover, these associations may be even further reinforced when (explicit) connections between the different kinds of reflection are made. This may for example be the case when adolescents not only reflect on the importance of their community service (civic reflection), but also on whether these activities fit their identity (identity reflection) and whether they see their moral value (moral reflection). This way adolescent's reflection on one of these aspects (civic, identity, moral) may more easily trigger reflection on the other aspects, which may strengthen the associations between adolescents' volunteering, morality, and identity.

### **The moderation effects of community service hours and the integrity of the reflection intervention**

As various studies have found that adolescents who more frequently perform community service, experience more positive community service effects (e.g., overview by Billig, 2009; Patro, 1999; van Goethem et al., 2013), we examine whether adolescents who perform more community service hours also change more in their moral and identity development and their volunteering behavior. Further, earlier findings suggest that more frequent (structured) reflection yields stronger community service effects (e.g., overview by Billig, 2009, van Goethem et al., 2013). We therefore examine whether service effects are stronger when adolescents who receive the reflection intervention more strongly adhere to this intervention.

## **METHOD**

### **Participants**

458 adolescents (54.8 % male, 45.2 % female;  $M$  age = 15.70;  $SD$  = .77) participated in this study, divided in three groups: Community service students were randomly assigned to the Community service + reflection group ( $N$  = 172; 9 school classes) or the Community service group ( $N$  = 159; 8 school classes). These two groups are referred to as respectively the CS+ group and CS group. These groups were compared to a Control group that did not perform community service ( $N$  = 66; 3 school classes), which is referred to as the NCS group.

Schools were located in suburban areas of the Netherlands, and mainly contained students of Dutch origin: 81.8 % of the participants were of Dutch origin, and 18.2 % were first or second generation immigrants: of which 4.5 % were Western immigrants and 13.2 % were non-Western immigrants (for 0.5% of the immigrants we could not indicate whether they were Western or non-Western immigrants). In addition, 63.3 % of the adolescents were non-religious whereas 36.7 % indicated to be a member of a church or religious community.

Religious adolescents indicated to be Catholic (14.8%), Protestant-Christian (13.7%), Islamic (6.2%), Hindu (0.7%), or had another religious background (1.4%). Most adolescents came from two-parent households (81.6%) and all adolescents had one or more siblings. At the beginning of the school year (T0; pre-test), 31% of the adolescents indicated to have performed volunteering in the past year, which is in the range of volunteering ratings in Dutch society (Bekkers & Boezeman, 2011).

Adolescents in the community service groups performed community service within non-profit organizations or commercial organizations with a civic purpose or aim. They were free to choose from a number of community service organizations provided by school. They also had the opportunity to come up with community service organizations themselves. The community service activities were often determined by the community service organizations and included social and functional work (e.g., planting trees, cleaning chores). Community service was obligatory, but not graded by the school.

### **Procedure**

**Selection of participants.** All Dutch high schools require students to perform community service, however the age at which students are required to perform community service differs between schools. As age has an important impact on community service effects (e.g., van Goethem et al., 2013), we controlled for the effect of age by only selecting schools in which students were required to perform community service in the 9<sup>th</sup> or 10<sup>th</sup> grade (in The Netherlands this is equal to the third or fourth year of high school). This resulted in the selection of 17 school classes from 8 schools that would perform community service in that school year. All were higher general education and pre-university education high school classes to keep the educational level between adolescents constant. These school classes were randomly assigned to community service with or without reflection by the schools (*CS group* or *CS+ group*). If schools also included 9<sup>th</sup> or 10<sup>th</sup> grade school classes that would not yet perform community service during the school year, these school classes were selected as the control group (*NCS group*).

**Data collection.** In each school class, data were collected with questionnaires that were administered at two time points. First, at the beginning of the school year (T0; pre-test), before adolescents in the *CS group* and *CS+ group* would start their community service. Second, at the end of the school year (post-test; 6 to 7 months after pre-test), after these adolescents would have finished their community service and adolescents in the *CS+ group* would have completed the reflection intervention program. Questionnaires were administered during one school-hour (45-50 minutes). Each hour started with one or two trained examiner(s) giving a brief, standardized introduction and instruction. In this instruction adolescents were guaranteed confidentiality and were asked to answer all items of the questionnaire individually, without talking to their classmates. All participants were rewarded with a small gift voucher when they completed all assessments during our study.

## Intervention

The reflection intervention program was designed and developed as a school program to stimulate adolescents' civic, moral, and identity development and the connection between these areas through structured reflection. The program contained two major elements: a structured classroom session of one school hour and six individual, structured, online writing-assignments. Each included morality-, identity-, and civically-related reflection activities.

With the aim of stimulating adolescents' moral development, adolescents learned about and reflected on children's rights issues, such as the right to be equally treated and the right to have a good life (free time, to be taken care of). They reflected on these issues from different viewpoints on a global level (learning and reflecting on examples in the world in which these rights were violated), but especially on a day-to-day level: on how these issues were connected to their community service and their own lives. With the aim of stimulating adolescents' identity development, adolescents also reflected on the identity related aspects of the community service and moral rights issues. This included reflection on how they acted (e.g., whether they dared to stand up for their opinion when they encountered problems), their experiences (e.g., what they liked about it and what not), whether they could express themselves during their community service, and what they learned about themselves while performing service. Further, with the aim of stimulating their civic development, adolescents were made aware of and reflected on the importance of civic engagement (e.g., what would happen if there were no volunteers helping the organization in which adolescents performed their community service) and on various opportunities to become civically engaged, such as becoming a member of a youth organization that defends human rights, expressing their opinion on civic and moral issues (e.g., through online voting; Vromen, 2011), volunteering for a local organization, and being active on the national volunteering day.

The program started with the classroom session, led and taught by the first author of this study and a trained developmental psychologist. During this session, students were informed on real-life children's rights (issues) through a short video. Structured, guided role-plays and group discussion were used as reflection tools; moral issues (e.g., being judged and discriminated by the peer group because they disapprove your choice of community service) and identity issues (e.g., trying new activities as a community service activity) were incorporated in (consecutive) role-played arguments between two students on choosing one's community service. These arguments were observed and then discussed among all students in the classroom.

Frequently used teaching strategies in moral and civic education, including guided role-play and group discussion (using scaffolding by the teacher), were used as it requires students to be actively involved in their learning process and it can stimulate perspective taking (e.g., Johansson et al., 2011). Further, role-plays can make implicit concepts more explicit and concrete, and guided discussion by the teacher can help adolescents to compare and integrate old and new experiences and perspectives (see Steinke, Fitch, Johnson, & Waldstein, 2002; Johansson et al., 2011).

After the classroom sessions, students individually completed the writing assignments in which various media (short videos, internet pages) were incorporated to make them have more impact and make them more appealing. These writing assignments were structured to prevent mere description of the community service events and to promote connections between the civic, identity, and moral aspects of the community service and the wider context (see Bringle & Hatcher, 1999). Further, structured writing assignments are suggested to be useful to structure thoughts, experiences, and complex issues or problems and make them less overwhelming (e.g., Bringle & Hatcher, 1999). Further, they are thought to provide means to focus on particular ideas or themes connected to the community service experience or its wider context (Waterman, 1997).

Five of the writing assignments included a sub-assignment in which adolescents reflected by means of peer discussions on an online forum which was especially developed for the intervention. On this forum students were presented with contrasting statements on moral and identity related issues, after which they anonymously had to indicate with which statement they agreed the most and why. In addition, they had to express their opinion on the reasons other students gave for choosing a certain statement. Through the setup of the website and the discussion with peers, adolescents were presented with various perspectives (cf. Eylar, 2002; Waterman, 1997). The fact that it involved peer discussion may have strengthened the impact of the reflection intervention as peers have a large socializing role and influence on adolescents (on for example volunteering; van Goethem et al., 2013) due to their shared interests, traits and social power (e.g., Cohen & Prinstein, 2006; Smetana, Campione-Barr, & Metzger, 2006).

### **Measures**

**Volunteering.** In the current study we used the two aspects of the Civic Prosocial Behavior Inventory (CPBI; van Goethem, van Hoof, van Aken, Boom, & Orobio de Castro, 2012): whether adolescents performed organized volunteering and how often they volunteered, the latter also referred to as their “volunteering involvement”. Organized volunteering was defined as: activities within an organization, society, or club, which are intended to positively contribute to the environment, individuals, groups of people, or the society as a whole, without receiving money (small compensations are allowed). When adolescents indicated to volunteer, they were also presented with a set of twenty-two traditional as well as new forms of volunteering activities such as organizing an event, collecting money, demonstrating, or administering the website of an organization. They reported whether, and if so, how often they had performed each of these activities for the organization they had been most active in on a scale that ranged from one to seven: 1 = “not”, 2 = “not, but maybe in the future”, 3 = “among one to four times”, 4 = “among five to ten times”, 5 = “among once a month”, 6 = “among once a week”, 7 = “among several times a week”. If adolescents indicated that they were active in a second organization, they answered the same questions again for that organization. All separate activity scores for maximally two organizations were recoded (1 = 0, 2 = 0, 3 = 1, 4 = 2, 5 = 3, 6 = 4, 7 = 5) and summed, with a higher score indicating a larger amount of time spent to volunteering work, or in other words a larger amount of

volunteering involvement (ranging from 0 to 55). At pre-test, adolescents indicated whether they had volunteered during the past year. At post-test, adolescents indicated whether they had volunteered in the past half year, to assess whether changes in adolescents' volunteering behavior had occurred from pre-test to post-test. As the length of the period over which adolescents reported at pre-test and post-test differed, adolescents' volunteering involvement score at post-test was corrected (divided by half).

**Morality: general moral thought.** The Children's Rights Evaluation Questionnaire (CREQ; van Hoof & Raaijmakers, 2010; cf. van Goethem et al., 2012) was used to assess adolescents' general moral thought. General moral thought contains three elements: moral understanding (understanding and agreeing with moral rights issues), moral referral (understanding collective responsibility for moral rights issues), and moral commitment (feeling personally responsible for and committed to moral rights issues; see van Goethem et al., 2012). Adolescents were asked to score each of three adapted articles of the Convention on the Rights of the Child (<http://www2.ohchr.org/english/law/crc.htm>) on eight 9-point scales. An average score was calculated out of all item scores, which could range from 1 to 9. This scale has shown to be a reliable measure (e.g., van Goethem et al., 2012) which was also found in the current study (pre-test:  $\alpha = .72$ ; post-test:  $\alpha = .71$ ).

**Identity: identity integration.** Adolescents' identity integration was measured with the Spatial Continuity of Identity Questionnaire (SCIQ; van Hoof & Raaijmakers, 2002), which has shown to be a valid measure of identity. First, adolescents chose the three most personally revealing identity contexts. from a list of seven contexts, adjusted to adolescents' way of life (and often used as identity contexts in former identity research; van Hoof, 1997). Contexts were: school, home, own home (defined as living independently from the parents), leisure time, work, religion, and politics (defined as being active in for instance Amnesty International or in a students' board). Next, adolescents were asked to evaluate 20 items for each of their three contexts. The items adolescents evaluated, represented four identity dimensions which are often explicitly or implicitly measured in former identity status research (see also van Hoof & Raaijmakers, 2002): Competence (four items referring to individual abilities, e.g., "I make a decision easily"), Inhibition (six items representing self-doubt that has a paralyzing effect, e.g. "I am insecure"), Feeling (four items, e.g., "I am lonely"), and Interpersonal Behavior (six items representing how individuals relate to, or act toward, their social environment, e.g., "I am bossy"). These items were evaluated on a seven-point scale ranging from "I am totally not like that" to "I am totally like that". Each adolescent's identity integration was then determined by calculating for each adolescent the correlations between their three context-specific identities. The mean of these correlations represents their level of identity integration, with a higher score representing a more integrated identity.

**Community service hours (between pre-test and post-test).** At post-test adolescents were asked to indicate how many hours of community service they had performed during the past school year. The number of hours ranged from 0 to 100 hours.

**Integrity of the reflection intervention.** The extent to which adolescents adhered to the reflection intervention was calculated by adding the score for whether they attended the classroom reflection session (score 0-1) to the number of individual reflection intervention assignments they completed. As each individual assignment took (on average) a half hour to complete, while the classroom session took one school hour (and thus was twice as intensive), the number of completed individual assignments ( $N = 0-6$ ) was corrected by dividing it by 2 (score 0-3). This resulted in a reflection integrity score ranging from 0 to 4.

### Analyses

We tested the effects of community service and the reflection intervention on adolescents' level of volunteering, identity, morality, and the interrelations between these variables in a multi-group cross lagged model, using Structural equation modeling (SEM) in Mplus (Version 6; Muthén & Muthén, 1998-2010). This means that we compared the level of adolescents' volunteering, morality, and identity at post-test and their interrelations between the three examined groups: the CS+ group, the CS group, and the NCS group, while controlling for initial differences between the groups at pre-test.

For this purpose, we initially tested a model in which adolescents' volunteering and identity were included as outcome variables (model 1). Morality was excluded from this model to reduce the number of freely estimated parameters. Model 1 was our primary model as most indication for the relation between identity and volunteering was found (e.g., van Goethem et al., 2012). Subsequently we tested two additional models: a model in which adolescents' volunteering and morality were included as outcome variables (model 2), and a model in which adolescents' volunteering, and identity controlled for their morality were included to account for the shared explained variance in adolescents' volunteering by their morality and identity (model 3).

To examine the improvement in model fit (using the Satorra-Bentler  $\Delta\chi^2$ -difference test; Satorra & Bentler, 2001), a constrained model was compared to a free model in which the parameters for the rank-order stability paths and the cross-lagged paths from pre-test to post-test, and the parameters at post-test were freely estimated for each group. Thus, the effect of the intervention on all parameters was estimated.

In all models, a zero inflated poisson regression was used to account for the large number of zero-scores (non-volunteers) in our volunteering measure at post-test by combining a point mass at zero with a proper count distribution (for a detailed description of zero inflated poisson regression see Lambert, 1992). It combines predicting the inflated binary volunteering variable (not volunteering = 0 and volunteering = 1) with a regression predicting the value of the count dependent variable (the involvement in volunteering for adolescents who volunteered). At pre-test, where volunteering was an independent variable, we used volunteering as a continuous variable as Mplus treats zero-inflated independent variables as continuous variables.

To avoid problems of non-convergence due to divergent variances, we divided the variables with high variance, which were the number of community service hours (before pre-test and between pre-test and post-test) and volunteering involvement (at pre-test and post-test), by 10 before using them in our analyses. Moreover, the transformed volunteering involvement scores at post-test were rounded off to integer values to reflect the actual count character of this variable.

In all models, we tested the moderation effect of the amount of community service hours between pre-test and post-test (since all groups, as also a few adolescents in the *NCS group*, performed some community service hours) and of the reflection integrity score (for the *CS+ group*; this parameter was zero for the other groups) on the outcome variables. Further, we controlled for adolescents' sex and the amount of community service hours adolescents had performed before pre-test. The majority of participants who already had experience with community service had performed maximally 20 hours of community service. Initially, we also controlled for adolescents' age. However, as age did not affect the estimates of the outcomes variables, we excluded it from our final model for reasons of parsimony.

The percentages of missing data for the outcome variables in our model were 13% (morality), 14% (volunteering), and 30% (identity). Monte Carlo integration with robust maximum likelihood estimation (MLR) was used to impute missing data and to calculate the bias-corrected standard errors and confidence interval (Muthén & Muthén, 1998-2010). Further, sixteen of the adolescents who were in the *NCS group* eventually did perform community service and 36 of the adolescents who were in the *CS group* or *CS+ group* eventually did not perform community service. The former group of adolescents already started their community service activities before they were required to do so (for example, because they already found a community service project). The latter group of adolescents had already finished their service requirement in the previous school year or had not started their community service yet at post-test (but would for example start their community service during the summer recess of the school). We also compared model estimates when including and when excluding these adolescents from our analyses.

Lastly, as adolescents were nested within classrooms we tested the homogeneity of the school classes for all dependent variables. The intra-class correlations (ICC) for these measures were smaller than 0.05 which indicated that school-level variance was not particularly relevant.

## RESULTS

Table 1 presents descriptives of the outcomes and the moderation and control variables by group. Figure 1 gives an overview of the relations between the variables in model 1, with volunteering and identity as outcome variables and holding the parameters estimates for the three groups constant. At pre-test, before the community service (and reflection intervention) had taken place, we found that girls were more involved in volunteering than boys and we

found that the number of community service hours adolescents had completed before pre-test were positively related to their volunteering involvement at pre-test. Adolescents' sex and the number of community service hours were not interrelated nor were they related to adolescents' identity integration. Between pre-test and post-test, adolescents' volunteering and identity showed significant rank-order stability. No cross-lagged relationships were found between adolescents' volunteering and identity integration. Thus adolescents' identity and volunteering were not related to each other before the community service and reflection intervention had taken place. This was neither the case at post-treatment. At post-treatment, adolescents' volunteering was positively related to the number of community service hours they performed. Further, adolescents' reflection integrity score was negatively related to their identity integration and positively related to the number of community service hours they performed.

Table 1

*Descriptives for volunteering, identity, morality, and the moderation and control variables*

| Variable - dichotomous                  | NCS group |       | CS group |       | CS+ group |       |
|---|-----------|-------|----------|-------|-----------|-------|
|   | No        | Yes   | No       | Yes   | No        | Yes   |
| Pre-test whether one volunteers         | 46a       | 29    | 127      | 50    | 146b      | 47    |
| Post-test whether one volunteers        | 57        | 16    | 107      | 45    | 131       | 48    |
| Sex (girl)                              | 46        | 30    | 109      | 79    | 96        | 101   |
| Variable - continuous                   | M         | SD    | M        | SD    | M         | SD    |
| Pre-test volunteering involvement       | 2.11      | 3.60  | 1.44     | 3.46  | 1.23      | 3.25  |
| Post-test volunteering involvement      | 0.63      | 1.33  | 0.99     | 2.15  | 0.97      | 2.15  |
| Pre-test identity integration           | 0.76      | 0.17  | 0.72     | 0.23  | 0.74      | 0.21  |
| Post-test identity integration          | 0.76      | 0.22  | 0.72     | 0.22  | 0.72      | 0.24  |
| Pre-test morality                       | 5.89      | 0.85  | 5.75     | 0.81  | 5.74      | 0.85  |
| Post-test morality                      | 5.66      | 0.89  | 5.68a    | 0.85  | 5.57b     | 0.84  |
| CS hours before pre-test                | 9.35      | 15.69 | 12.02    | 17.55 | 9.06      | 12.97 |
| CS hours between pre-test and post-test | 4.62a     | 11.09 | 26.78b   | 20.85 | 27.87b    | 17.51 |
| Reflection integrity                    | -         | -     | -        | -     | 2.63      | 1.42  |

*Note.* NCS group = Control group; CS group = Community service group; CS+ group = Community service + intervention group. CS = community service. For the dichotomous variables in the table, volunteering (no-yes), sex (being a girl no-yes), the number of adolescents for the two levels of the variable are presented ("no" = characteristic not present; "yes" = characteristic present). The means and cross-tabs that do not share the same subscripts differ at  $p < 0.05$  according to the Waldtest.

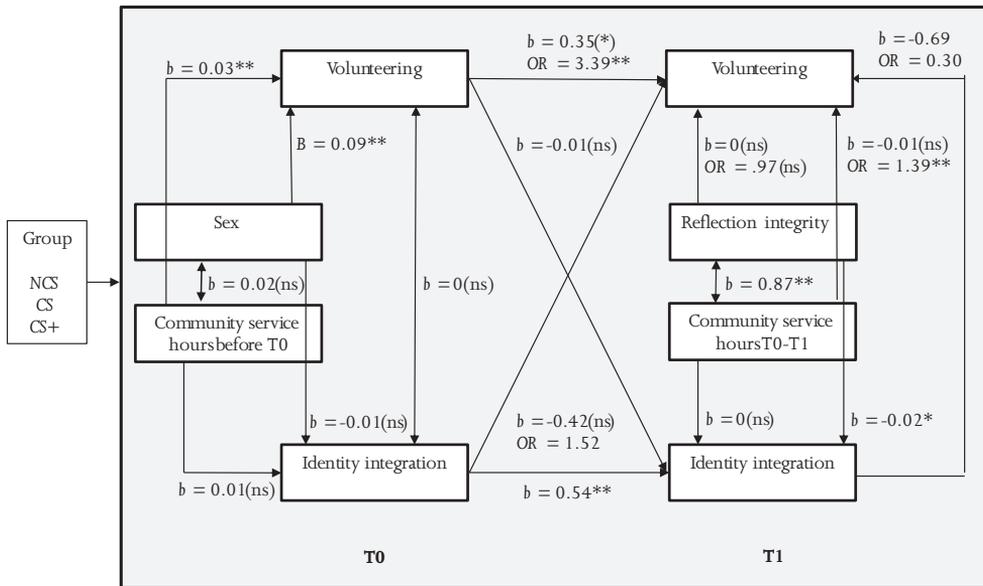


Figure 1. Parameter estimates (*b*'s) for the variables within model 1 at pre-test and post-test: volunteering, identity, and the control variables (sex, number of community service hours before pre-test, number of community service hours between pre-test and post-test, and reflection integrity score). For the paths to volunteering at post-test, the first value is the parameter estimate for volunteering involvement. The second value is the parameter estimate for whether adolescents volunteer (the dichotomous aspect of volunteering), which is an odds ratio (OR) instead of a *b*. Odds ratio estimates above 1 represent an increase in the chance of volunteering at post-test and odds ratios between 0 and 1 represent a decrease in the chance of volunteering at post-test.

ns = non-significant.<sup>(\*)</sup>  $p < 0.06$ . \*  $p < 0.05$ . \*\*  $p < 0.01$ .

When holding the parameter estimates for the model (model 2) with volunteering and morality as outcome variables equal for all groups, we found rank-order stability for morality between pre- and post-test ( $b = 0.33$ ,  $SE = 0.05$ ,  $p < 0.01$ ). Further, we found no cross-lagged relationships between adolescents' morality and volunteering: pre-test morality – post-test whether adolescents volunteered ( $b = -0.01$ ,  $SE = 0.13$ ,  $OR = 1.01$ ,  $p = 0.96$ ); pre-test morality – post-test volunteering involvement ( $b = 0.01$ ,  $SE = 0.09$ ,  $p = 0.95$ ); pre-test volunteering involvement – post-test morality ( $b = 0.01$ ,  $SE = 0.12$ ,  $p = 0.96$ ).

### Effects of the community service and the reflection intervention

Multi-group analyses showed effects of community service and the reflection intervention on adolescents' volunteering, identity, and morality which was indicated by a better model fit when the parameters were freely estimated for the three groups than when these parameters were constrained to be equal for these groups (Model 1: Satorra-Bentler corrected  $\Delta\chi^2(34) = 495.53$ ,  $p < 0.01$ ; Model 2: Satorra-Bentler corrected  $\Delta\chi^2(34) = 465.28$ ,  $p < 0.01$ ; Model 3:

Satorra-Bentler corrected  $\Delta\chi^2$  (43) = 672.03,  $p < 0.01$ ).

Below, the main effects and effects for the associations between the outcome variables at post-test (controlled for pre-test) are presented.

**Main effects.** Table 2 presents the main effects on adolescents' volunteering and identity in model 1. We found that the CS+ group showed significantly more volunteering involvement than the NCS group. However, the level of volunteering involvement did not differ between the CS+ group and CS group. In addition, the CS group also showed marginally significant more volunteering involvement than the NCS group. We did not find mean differences for the level of identity integration between the groups, and neither for whether they volunteered.

Similar effects on adolescents' volunteering were found in model 2 and in model 3, in which volunteering and identity, controlled for the level of adolescents' morality, were used as the outcome variables. Further, similar effects on adolescents' identity were found in model 3. In addition, the results of model 2 showed that there were no mean differences for the level of morality between the groups (NCS group:  $M = 2.57$ ,  $SE = 0.02$ ; CS group:  $M = 3.75$ ,  $SE = 0.50$ ; CS+ group:  $M = 3.92$ ,  $SE = 0.50$ ;  $pdiff = ns$ ).

Table 2  
Volunteering and identity integration by group at post-test

| Variable                 | NCS group |      | CS group |      | CS+ group |      |
|--------------------------|-----------|------|----------|------|-----------|------|
|                          | Es.M      | SE   | Es.M     | SE   | Es.M      | SE   |
| Whether one volunteers   | 0.36      | 2.28 | 0.27     | 0.75 | 0.20      | 0.90 |
| Volunteering involvement | -0.21a    | 0.97 | 1.91(b)  | 0.47 | 2.38b     | 0.32 |
| Identity integration     | 0.50      | 0.15 | 0.35     | 0.06 | 0.25      | 0.11 |

Note. NCS group = Control group; CS group = Community service group; CS+ group = Community service + reflection intervention group. Es.M = Estimated Means. For whether adolescents volunteer (0-1), Es.M = estimated percentage of adolescents who perform community service. Means that do not share the same subscripts differ at  $p < 0.05$  according to the Waldtest. Superscripts between brackets differ at  $p < 0.06$ .

**Effects on the interrelations between the outcomes.** The group effects for the associations between adolescents' volunteering and identity are presented in Table 3. For the association between identity and volunteering, we found that only for the CS+ group adolescents' identity integration was related to whether they volunteered or not: the less high their identity integration, the likelier they were to volunteer. This relation however did not differ from the other groups. Adolescents' identity integration was not related to their volunteering involvement.

The results of model 2 showed that adolescents' morality was not related to whether they

volunteered (NCS group:  $b = 2.63$ ,  $SE = 2.40$ ,  $OR = 13.87$ ; CS group:  $b = -0.17$ ,  $SE = 0.23$ ,  $OR = 0.84$ ; CS+:  $b = -0.05$ ,  $SE = 0.29$ ,  $OR = 0.95$ ;  $pdiff = ns$ ) nor to their volunteering involvement (NCS group:  $b = 0.13$ ,  $SE = 0.19$ ; CS group:  $b = -0.09$ ,  $SE = .28$ ; CS+ group:  $b = 0.07$ ,  $SE = 0.14$ ;  $pdiff = ns$ ).

The results of model 3 showed comparable results for the relation between adolescents' identity and volunteering as found when using model 1. Further, we found that adolescents' morality was not related to their identity integration (NCS group:  $b = 0.02$ ,  $SE = 0.03$ ; CS group:  $b = 0.03$ ,  $SE = 0.02$ ; CS+ group:  $b = 0.02$ ,  $SE = 0.02$ ;  $pdiff = ns$ ).

**Moderation effects.** In Table 3 the results for the associations between the moderator variables (community service hours and reflection integrity) and adolescents' volunteering and identity are presented (model 1). For the CS groups, the number of adolescents' community service hours was positively related to whether they volunteered (the more hours, the likelier they volunteered), but was not related to their volunteering involvement. These relations did not differ between the CS group and CS+ group. Lastly, for the CS+ group there was a marginally significant negative relation between their reflection integrity score and their identity integration: the higher their reflection integrity score, the lower their identity integration.

The results of model 2 showed comparable results for the relation between the control variables and adolescents' volunteering as found in model 1. Further, it was shown that neither the number of community service hours nor reflection integrity was related to adolescents' morality (community service hours: CS group:  $b = -0.01$ ,  $SE = 0.03$ ; CS+ group:  $b = 0$ ,  $SE = 0.03$ ;  $pdiff = ns$ ; reflection integrity: CS+ group:  $b = 0.07$ ,  $SE = 0.04$ ). The results of model 3 showed comparable results for the relation between the control variables and adolescents' volunteering and identity as found in model 1.

**Additional analyses.** Controlling for effects of missing values and group irregularities, we found that model estimates remained the same after we removed the 16 adolescents who were in the NCS group but did perform community service from the analyses. This also applied when the 36 adolescents who were in the community service groups but eventually did not perform community service were removed from the analyses, except that adolescents' estimated means on morality became higher in the community service groups than in the NCS group (NCS group:  $M = 2.58$ ,  $SE = 0.62$ ; CS group:  $M = 3.57$ ,  $SE = 0.54$ ; CS+ group:  $M = 3.71$ ,  $SE = 0.52$ ;  $pdiff < 0.01$ ). Further, in the CS group the relation between the number of community service hours and whether adolescents volunteered became non-significant ( $b = 0.29$ ,  $SE = 0.37$ ,  $OR = 1.34$ ,  $p = 0.44$ ).

Table 3

Relations between adolescents' volunteering, identity integration, and their relation with community service hours and reflection integrity by group

|   | NCS group |      | CS group   |      | CS+ group   |      |
|---|-----------|------|------------|------|-------------|------|
|   | b/OR      | SE   | b/OR       | SE   | b/OR        | SE   |
| Identity integration<br>– Whether one volunteers      | 0.89/2.44 | 2.70 | -0.71/0.49 | 1.27 | -2.23/0.11* | 0.90 |
| Identity integration<br>– Volunteering involvement    | -0.81     | 0.83 | -0.81      | 1.10 | -0.80       | 0.54 |
| Community service hours<br>– Whether one volunteers   | -         | -    | 0.25/1.28* | 0.13 | 0.27/1.31** | 0.12 |
| Community service hours<br>– Volunteering involvement | -         | -    | 0.02       | 0.05 | -0.01       | 0.05 |
| Community service hours<br>– Identity integration     | -         | -    | -0.01      | 0.01 | 0.02        | 0.01 |
| Reflection integrity<br>– Whether one volunteers      | -         | -    | -          | -    | 0.16/1.17   | 0.16 |
| Reflection integrity<br>– Volunteering involvement    | -         | -    | -          | -    | -0.07       | 0.10 |
| Reflection integrity<br>– Identity integration        | -         | -    | -          | -    | -0.03(*)    | 0.01 |

Note. NCS group = Control group; CS group = Community service group; CS+ group = Community service + reflection group. For the logistic regression part of the model, in which paths to whether adolescents volunteer (0-1) are predicted, b's are logits. These logits are inverted to odds ratios (OR). Odds ratio's between 0 and 1 represent a decrease in the chance of having performed volunteering in the past year, and estimates above 1 represent an increase in the chance of having performed volunteering in the past year.

(\*)  $p < 0.06$ . \*  $p < 0.05$ . \*\*  $p < 0.01$ .

## DISCUSSION

The aim of this study was to examine the effects of community service and the effects of civic-, identity-, and moral-reflection during community service on adolescents' volunteering, identity, and morality.

We found that adolescents who had performed school-required community service volunteered more often after performing community service than a control group of adolescents who did not perform community service (post-test controlled for pre-test). Among the adolescents who performed community service, the group that received the reflection intervention did not differ from the group without the reflection intervention. This suggests that community

service and not reflection is most important in causing an increase in adolescents' volunteering involvement, which is in contrast with recent meta-analytic findings (van Goethem et al., 2013), but in accordance with doubts some authors have about whether reflection plays a central role in community service effects (e.g., Hart et al., 2008). On the other hand, we did find some indication that reflection may reinforce the effect of community service on adolescents' volunteering involvement. Volunteering involvement of adolescents in the NCS group more clearly differed from CS+ group (a significant difference) than from the CS group (a marginally significant difference). Further, mean differences between the three groups were in the expected directions, with adolescents in the CS+ group having the highest estimated volunteering involvement.

Although group differences in whether adolescents volunteer and in their identity and morality were also in the expected direction, no significant group differences were found for these outcomes. This is probably because, overall, short-term changes in the outcomes were very small and therefore not easily detected. The fact that changes were found in adolescents' volunteering, but not in adolescents' identity integration and morality may be because they have a more indirect connection to adolescents' community service than adolescents' volunteering behavior; the moral and identity aspects of the service experiences may not always be obvious to adolescents (e.g., Bernacki & Jaeger, 2008; Ogden & Claus, 2006). Generally, personal characteristics such as adolescents' morality and identity may also be less likely to change than behavioral outcomes such as volunteering. Further, the fact that changes were found in adolescents' volunteering involvement but not in whether they volunteer may be because the former aspect of volunteering is more sensitive to change than the latter aspect.

In accordance with these explanations, shifts in adolescents' identity and morality but also in whether they volunteer, could have required a more intensive community service experience and a more intensive reflection intervention than was the case in our study. We also found some indication for the idea that more frequent service experiences and reflection reinforce community service and reflection effects, as adolescents who performed more community service hours were more likely to volunteer and adolescents who completed more assignments of the reflection intervention had a less highly integrated identity. Additional indication for this idea is provided by earlier findings (see Billig, 2009; Patro, 1999; van Goethem et al., 2013). For example, Patro (1999) found that shifts in adolescents' moral development were only visible when adolescents had performed more than 36 hours of community service.

In addition, to establish shifts in adolescents' identity or morality it may also be important that adolescents perform community service with clear moral characteristics, such as working at a soup kitchen in which case adolescents are confronted with inequality in society (e.g., Hironimus-Wendt & Wallace, 2009; Yates & Youniss, 1996). Further, attention should be paid to identity related aspects of the community service (Chang, Chen, Huang, & Yuan, 2012), which are often referred to as "youth voice": "the inclusion of young people as a meaningful part of the creation and implementation of service opportunities" (Fredericks, Kaplan, Zeisler, 2001, p.1 in Billig & Northup, 2008). This for example means including all adolescents in the

process of selecting their community service as well as their service activities (which was not the case for adolescents in our study). This way the community service fits to adolescents' needs and wants.

Alternatively, it could also be that no short-term effects on adolescents' identity, morality, and whether they volunteer can be found as shifts in these outcomes take some time. This could be because the processing of community service experiences may go on after adolescents have finished their community service, which is for example in accordance with the finding that reflection after finishing community service can have beneficial effects (Eyler, 2002; Ogden & Claus, 2006; van Goethem et al., 2013). Further, consequential shifts in adolescents' morality and identity may stretch over longer periods of time (e.g., Eisenberg, Cumberland, Guthrie, Murphy, & Shephard, 2005; Klimstra, Hale, Raaijmakers, Branje, & Meeus, 2010).

Future studies examining longer-term community service and reflection effects are therefore valuable but can face practical problems. One of these problems can be that community service- and comparison-groups are not likely to remain intact over time. This can be due to changes in class composition or due to changes in the community service requirement of the comparison (control) groups, as was the case in our study.

The results on the interrelations between the studied outcomes (at post-test), showed a negative association between adolescents' identity integration and whether they volunteered for the CS+ group: these adolescents were more likely to volunteer when they had a less highly integrated identity. This association between identity and volunteering is comparable with earlier findings in which a negative association between identity integration and volunteering involvement was found (van Goethem et al., 2012), and may be an indication of identity exploration and being more open to new experiences such as volunteering (Crocetti et al., 2012; see van Goethem et al., 2012). The fact that this relation was only found for the CS+ group, but not for the other groups may show that the reflection intervention started a process in which a connection between adolescents' identity and volunteering was made. This explanation should, though, be considered with caution as this relation was not strong enough to differentiate between the examined groups. Perhaps a stronger connection between adolescents' volunteering and identity could be made when using a more intensive reflection intervention than was the case in our study (e.g., Billig, 2009; van Goethem et al., 2013).

No indication was found for a relation between adolescents' morality and volunteering. This is in accordance with the findings of van Goethem et al. (2012) who found more indication for a relation between volunteering and identity than for a relation between volunteering and morality. No relation was found between adolescent's morality and identity, which seems to contradict earlier findings. One explanation for the lack of this association in our study could be that one general measure of morality was used instead of a specific measure of one or more dimensions of morality. These dimensions of morality, such as understanding moral issues versus feeling personally committed to act accordingly, may each have a different relation to volunteering (e.g., van Goethem et al., 2012). This may also be an additional or alternative

explanation for why no associations between adolescent's morality and volunteering were found.

The most important strength of our study was that, as far as we know, it was the first study that examined experimentally whether reflection has an impact on community service effects. Additionally, it is one of the few studies in which specific kinds of reflection were manipulated to gain knowledge on the conditions by which reflection in combination with community service affects adolescents' development in terms of their volunteering, identity, morality, and their interrelations.

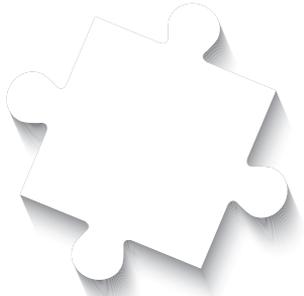
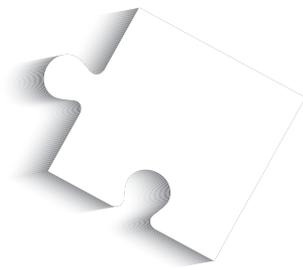
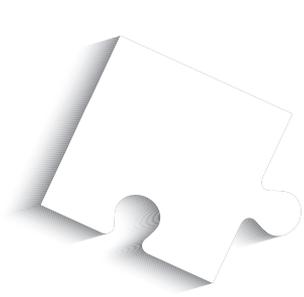
Some limitations of the current study should also be noted. First, whether adolescents performed community service was not randomly assigned to the groups, which ultimately does not allow drawing causal inferences on the effect of community service on the examined outcomes. Randomization of the community service was not possible as the school classes that performed community service were predetermined by the schools. To some extent this problem was however resolved by matching the control groups and community service groups on the school level (all groups came from the same schools) and on their educational level, and by controlling for initial differences between the groups, such as differences in age, sex, and the outcome variables.

Second, the short-term design we used in our study only allows drawing conclusions about short-term community service and reflection effects. Future studies could profit from using longer-term measurements to examine how community service and reflection influence adolescents' volunteering, identity, morality, and their interrelations over time. Additionally, our research findings suggest that it could be important to manipulate the intensity of the community service experience and reflection intervention, to examine whether stronger effects can be obtained when the intensity of these interventions are increased. Further, it could be valuable to examine whether and how the moral and identity aspects of the community service experience have an impact on service effects.

Third, our study was performed among a relatively specific sample of Dutch adolescents from higher educational levels. To examine the generalizability of our findings, it could be valuable to perform replication studies in other countries and conduct studies that also include lower-educated adolescents and adolescents in different grades of high school (e.g., van Goethem et al., 2013).

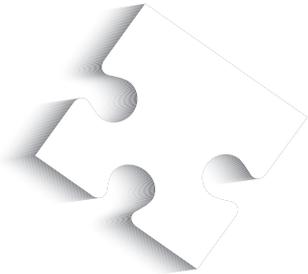
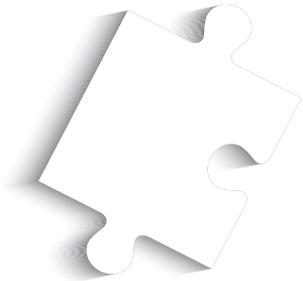
Notwithstanding these limitations, our study shows that community service can positively stimulate adolescents' volunteering involvement and provides indication that even a reflection intervention that has a relatively limited intensity, may strengthen this effect. These findings are promising for educators and practitioners who implement community service programs in adolescent populations. They indicate that community service and reflection could stimulate civic engagement. Further, our findings provide insight into how reflection can influence community service effects as they show that reflection may help to connect adolescents' volunteering behavior to their identity development.





# 6

## **Summary and General Discussion**



This thesis had two aims. The first aim was to examine the role of personal and social factors in adolescents' volunteering. For this first goal, we examined the role of morality, identity, parents' and friends' volunteering, civic family orientation, and community service (organized volunteering programs) in whether adolescents volunteered and in how often adolescents volunteered. The latter is also referred to as adolescents' "volunteering involvement". The second aim was to examine how volunteering influences adolescents' development such as their identity and morality. For this second aim, we focused on the influence of organized volunteering programs, which we refer to as "community service". We examined whether and how community service effects are moderated by reflection, by other characteristics of the community service (e.g., the quantity of community service), and by the characteristics of the adolescents who perform the community service (e.g., age).

The two main goals of this thesis were addressed in four studies, which were subsequently described in chapter 2 until chapter 5. In this chapter (chapter 6) we summarize the main findings of each of these studies and draw conclusions regarding the two main aims of this thesis. We conclude this chapter with notes on the strengths and limitations of this thesis, recommendations for future research, and practical implications of our findings.

### **Summary of findings**

**Study 1** examined the role of *personal factors*, specifically various aspects of adolescents' morality and identity, in adolescents' volunteering. For this purpose, we collected and analyzed cross-sectional data among 698 adolescents between 12 and 20 years old. Results showed that adolescents' identity was related to adolescents' volunteering. We found most indications that adolescents volunteered more often when they had a relatively less strongly integrated identity (the association between their context-specific identities, such as their identity at home and at school). When differentiating between adolescents' sex and age however, it became clear that this finding only applied to boys and younger adolescents (12-15 years old). Further, we found that increasing the number of one's identity contexts was related to more volunteering involvement among younger adolescents, and to being more likely to volunteer among older adolescents (16-19 years old). Adolescents' morality was not related to their volunteering, or only indirectly: through affecting adolescents' identity.

**Study 2** examined the role of *social factors*, particularly parents' and friends' volunteering and the family's civic orientation, in adolescents' volunteering. We used the same dataset as in study 1 for this purpose. Adolescents were found to be more likely to volunteer when their parents and friends volunteered. Further, adolescents volunteered more often when their family had a stronger civic orientation combined with more open and positive family communication. As found in study 1, age played an important role in the relative contribution of these social factors in adolescents' volunteering. Friends' and parents' volunteering contributed equally to younger adolescents' volunteering (12-15 years old), whereas the relative contribution of friends compared to parents was larger among older adolescents (16-19 years old). Further, the family's civic orientation combined with open family communication only contributed to older adolescents' volunteering.

**Study 3** was a meta-analysis examining the effect of community service on adolescents' development and the moderation of this effect by reflection-, community service-, and adolescent characteristics ( $k = 49$ ;  $N = 24,477$ ; aged 12 to 20). We found that community service had a positive effect on all examined outcomes: academic, personal, social, and civic outcomes. Moreover, structured reflection seemed to strengthen these effects. Furthermore, structured reflection turned out to be crucial in the overall (aggregated) effect of community service. Community service that included reflection had a substantial, beneficial effect (Mean  $ES = .41$ ) while community service in the absence of reflection yielded a negligible effect (Mean  $ES = .05$ ). To establish positive community service effects, reflection on academic content and competence (e.g., thinking about topics taught in school courses), and frequent reflection combined with frequent community service experiences were found to be important. We also found that higher community service effects were generally found when adolescents became older. However, the kind of community service adolescents performed (whether it is directed to people who are vulnerable or weak) and adolescents' sex generally did not seem to play a role in establishing these beneficial community service effects.

**Study 4** empirically studied the role of reflection in community service effects on adolescents' volunteering, identity, morality, and their interrelations. For this purpose we conducted an intervention study in which three groups of adolescents ( $N = 458$ ; 45.2 % female;  $M$  age = 15.70) were compared: (1) a control group (no community service), and two community service groups that were randomly assigned to (2) community service with a reflection intervention or to (3) community service only. Main effects were only found on how often adolescents volunteered. The community service groups volunteered more often at post-test than the control group. Although the two community service groups did not differ from each other, the community service group with the reflection intervention differed more clearly from the control group than the community service group without the reflection intervention. This finding may indicate that the reflection intervention strengthened the community service effect. In the community service group with the reflection intervention, we also found a relation between adolescents' volunteering and identity integration, which was strengthened when adolescents reflected more often on their community service. Lastly, adolescents became more likely to volunteer when they performed more community service hours.

The main findings of these studies can be used to reflect on the two main goals of our thesis.

### **The role of personal and social factors in adolescents' volunteering (first goal)**

Our findings show that the examined personal as well as social factors play a role in adolescents' volunteering. The specific role that these factors play depends on the aspect of volunteering that is considered: *whether* adolescents volunteer or *how often* they volunteer. Further, age and structured reflection may affect the influence of these factors.

**Whether versus how often adolescents volunteer.** We found that whether adolescents volunteered was explained by different factors than how often they volunteered. Adolescents were more likely to volunteer when their parents and friends volunteered. Adolescents were

more involved in volunteering when they had a relatively less strongly integrated identity, when they had performed community service, and when they were part of a family with a (relatively) high civic orientation and open communication.

These findings may indicate that different mechanisms underlie these two aspects of volunteering. For example, whether adolescents volunteer may depend more on volunteering possibilities or examples adolescents encounter in their environment such as volunteering by their parents and friends (e.g., Penner, 2002). In accordance with the idea of Janoski, Musick, and Wilson (1998), social practice or “behavioral modeling” may be part of this process. How often adolescents volunteer may be more dependent on personal experiences, motivations and values, including adolescents’ identity integration, performing community service, and civic family orientation. During community service, adolescents are (personally) active and have learning experiences. Also the family’s civic orientation is a personal experience as adolescents are part of the family. They thus actively contribute to the family’s civic orientation and are likely to have internalized this family civic orientation (in accordance with the idea of value transmission; Janoski et al., 1998). The influence of performing community service oneself and the family’s civic orientation is therefore also different from having parents or friends who volunteer, the latter being a more distal and external experience.

To further explore the underlying mechanisms and meaning of whether versus how often adolescents volunteer, it is important to study the role of additional personal and social factors in these two aspects of volunteering. For example, it could be relevant to examine how these aspects of volunteering are related to various internal volunteering motivations (e.g., because they feel responsible to positively contribute to society) and external volunteering motivations (e.g., because they were asked to volunteer). In addition, it would be useful to study personal versus social factors in one model to examine their relative contribution in explaining these two aspects of volunteering. This would require a larger dataset than the one we used in this thesis.

**Younger versus older adolescents.** Age also played an important role in the contribution of personal and social factors in explaining how often adolescents volunteered and whether they volunteered. Adolescents’ identity integration seemed important in determining how often younger adolescents volunteered, whereas the family’s civic orientation was important for how often older adolescents volunteered. This difference may be an indication that how often adolescents volunteer may have a different meaning for younger compared to older adolescents. Whereas it may be an indication of being open to explore new experiences for younger adolescents, it may be an indication of personal commitment and/or of one’s values or orientation for older adolescents. So for older adolescents, more volunteering involvement would not only mean volunteering more often (a time-investment), but also more personal investment in volunteering (cf. Rose-Krasnor, 2009).

We also found that, when adolescents grow older, friends’ volunteering may become more important for whether they (start to) volunteer than parents’ volunteering. This is for example

in accordance with the idea that older adolescents spend more time with their friends and are therefore more exposed and influenced by the (civic) behavior of their friends (cf. Smetana, Campione-Barr, & Metzger, 2006). Further, the number of identity contexts also becomes important for whether adolescents volunteer. As having more identity contexts involves participating and feeling at home in more societal contexts, this could mean that older adolescents with more identity contexts also encounter more volunteering possibilities and examples (i.e. social capital; Hart, Matsuba, & Atkins, 2008) and are therefore more likely to volunteer.

The role of *reflection* in explaining adolescents' volunteering is discussed in the subsequent section of this chapter in which the effect of community service on adolescents' development is discussed.

### **The effect of volunteering (community service) on adolescents' development (second goal)**

The results of our meta-analysis show that community service (programmatic volunteering) positively influences various aspects of adolescents' development: their behaviors and attitudes in the academic, personal, social, and civic domain. Further, these effects were generally stronger among older adolescents. When adolescents grow older, they may become more open to and therefore affected by civic activities such as community service. This may for example be due to their increased ability in perspective taking, in empathic concern for others, and in processing and integrating new experiences (cf. Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005; Youniss, McLellan, & Yates, 1997).

The results of our meta-analysis also show that structured *reflection* plays a very important role in effective community service. The overall beneficial effect of community service was only found when community service included structured reflection. Additionally, reflection also seemed important for beneficial effects in all examined domains (academic, personal, social, and civic).

The empirical findings of our intervention study (study 4), however, showed mixed support for beneficial effects of community service and reflection. In our study community service stimulated how often adolescents volunteered but did not affect adolescents' morality or identity. Additionally, we found little support for the importance of reflection in community service effects as reflection did not play a crucial role in stimulating adolescents' volunteering; we only found that it might have strengthened it. Our findings could on the one hand be explained by the fact that although community service with reflection may be generally beneficial, it may not stimulate all specific outcomes such as morality and identity. On the other hand, specific characteristics of our intervention study may explain our findings.

First, some general characteristics of the study may explain our findings, such as that only short-term community service effects were examined. Changes in characteristics such as morality and identity may take time (e.g., van Hoof & Raaijmakers, 2003; Raaijmakers &

van Hoof, 2006) and may therefore be only visible when examining longer term effects. Second, characteristics of our reflection intervention may explain our findings. For example, in contrast to the studies included in the meta-analysis, we randomized reflection as an element of community service. Additionally, in our study, adolescents performed a relatively modest number of reflection assignments and community service hours compared to those of the studies included in the meta-analysis (7 times of reflection and 27.37 hours in our study compared to 24 times of reflection and 65.79 hours in the meta-analysis). The findings of the meta-analysis showed that frequent reflection stimulates community service effects, especially when combined with frequent community service. The reflection intervention and the community service in our study may thus not have been intensive enough to elicit strong effects. This may especially apply to adolescents' morality and identity as changing these characteristics may not only take more time but also more effort compared to behaviors such as adolescents' volunteering (e.g., Patro, 1999).

Based on observations we made during the implementation of the reflection intervention, another explanation is that the quality of adolescents' reflection may not have been optimal in our intervention. This may be due to not having provided adolescents with enough teacher-guidance during this reflection intervention. In our meta-analysis (study 3) we found that it may be important to make a clear connection between the topics of structured reflection and adolescents' community service experiences to establish positive community service effects (in the meta-analysis referred to as "reflection on academic content and competence"). This may especially apply to topics that are more abstract or more indirectly related to these community service experiences, such as moral topics. We experienced that guided reflection by trained teachers or professionals is important to make this connection (e.g., Root & Billig, 2008). For example, during the classroom session of the reflection intervention, adolescents seemed better able to connect moral issues with their service experiences when we clarified the meaning of these moral issues, when we gave and asked adolescents (for) examples of these issues in their community service, and when we incorporated these moral issues in role-plays (e.g., in these role-plays adolescents were judged and discriminated because of their choice of community service). We however did not provide guided reflection (nor role-play) during the other, written assignments of our reflection intervention. This may also explain why we did not find strong effects, especially for the (more abstract) moral and identity outcomes.

Overall, we suggest that community service including reflection has beneficial effects, especially when reflection is frequent and is of high quality. But how strong these effects are, (also) depends on study characteristics such as whether short-term or longer-term effects are examined and whether reflection is randomly allocated to community service, and depends on the specific outcomes that are examined.

### **Strengths, limitations, and future research**

Our findings should be interpreted in light of the strengths and limitations of the design and execution of the studies in this thesis. A clear limitation of this thesis is the cross-sectional

nature of study 1 and 2 which makes it difficult to determine the direction of the relations between the examined personal and social factors and adolescents' volunteering. To overcome this limitation, it would be important for future studies to include more measurement occasions of the examined factors and volunteering over a longer period of time. The same type of research design can be used to examine longer-term effects of community service and reflection.

Another limitation is that we exclusively used self-reports measures in our empirical studies. This limitation also applies to the general research field on volunteering as our meta-analysis showed that 80% of the studies solely used self-reports. Although self-reports are valid ways to assess thoughts and experiences such as volunteering (e.g., Hart & Carlo, 2005), they can also be influenced by social-desirability (cf. Hart, Matsuba, & Atkins, *in press*; Moely, Mercer, Illustre, Miron, & McFarland, 2002). The validity of our findings could be improved by including more objective measures of the examined concepts in our thesis. These for example could involve behavioral measures (e.g., behavioral indicators of morality, counts of signing up for volunteering activities), observations, and multiple informants of adolescents' behaviors (e.g., Celio, Durlak, & Dymnicki, 2011).

One important strength of this thesis is that we thoroughly and precisely measured volunteering with the Civic Prosocial Behavior Inventory (CPBI). Our volunteering measure aimed to overcome the risk of under- and overrepresentation of volunteering. We controlled for underrepresentation by providing adolescents with a definition and examples of volunteering before they indicated whether they volunteered. This is because adolescents are less likely to realize their activities are actual volunteering activities when they are merely asked "whether they volunteer" (Toppe, 2005). We controlled for over-representation due to social desirable answering by adding the option "no, but maybe in the future" when asking adolescents whether and how often they volunteered. The assumption is that adolescents are less likely to over-report their actual volunteering behavior when they are given the option to show they are willing to be involved in these kinds of activities (Andolina, Keeter, Zukin, & Jenkins, 2003; Smetana & Metzger, 2005). Moreover, we measured both whether adolescents volunteered and how often they volunteered, which proved to be an important differentiation. We also analyzed these two aspects of volunteering in a precise way (by using a zero-inflated poisson regression; Lambert, 1992). Third, we precisely measured how often adolescents volunteered by asking them to rate specific volunteering activities and by using specific answering categories (e.g., Toppe 2005; Andolina et al., 2003). Taken together, this instrument may be an asset for the volunteering research field.

Future studies could also profit from examining the multiple aspects of volunteering that were included in the CPBI. It might especially be valuable to consider the kind of volunteering experiences adolescents have, as they may play an important role in determining the learning potential of volunteering and the kind of volunteering effects (e.g., see Hart et al., 2008). For example, being confronted directly with moral issues in society during volunteering such as when working in a soup kitchen, may have a stronger impact on adolescents' moral

development than other kinds of volunteering such as tutoring peers or coaching a soccer team (e.g., Metz; Mclellan, & Youniss, 2003; Mclellan & Youniss, 2003). In this thesis we studied one kind of volunteering, that is volunteering directed to people who are vulnerable or weak, which generally did not affect (organized) volunteering effects. It however seems valuable to further explore whether this kind of volunteering may be important for specific kinds of outcomes, such as adolescents' moral development (e.g., Hironimus-Wendt & Wallace, 2009). Also the prediction and effects of additional kinds of volunteering could be further examined. For example, we expect that volunteering is more beneficial when the kind of volunteering fits the developmental needs and characteristics of adolescents and when it is a meaningful experience (e.g., Scales, Blyth, Berkas, & Kielsmeier, 2000). The latter being an (other) indication of personal investment in volunteering (cf. Rose-Krasnor et al., 2009). Future studies could investigate specific indicators of these kinds of volunteering experiences and their impact on the prediction and effects of adolescents' volunteering.

Another strength of this thesis is our thorough examination of the role reflection plays in adolescents' volunteering. In our meta-analysis we found indications that reflection is an important element of effective community service (organized volunteering) and that this applies to various countries and contexts. We also contributed to a further understanding of what kinds of reflection are beneficial. Moreover, by randomizing the reflection intervention in our own study, we were the first to examine whether reflection plays a causal role in community service effects. We also think more research is needed to further examine the role of reflection in these effects. We suggest that more aspects of reflection, including guided reflection and for example critical reflection, should be examined (e.g., Root & Billig, 2008). Additionally, we need more studies that randomize reflection, including specific elements of reflection, to get an even better understanding of what kinds of reflection are beneficial and what processes underlie reflection effects. For example, randomization could be used to compare different kinds of reflection (e.g., Lemming, 2001). Additionally, it can be used to make sure that the reflection effects that were found are due to reflection itself instead of other factors, such as doing extra activities on top of service experiences. To test this latter idea, two randomly assigned community service groups could be compared: a group that completes a number of reflection-assignments with a group that completes the same number of assignments that do not involve reflection (for example, keeping score of what activities one has performed during community service).

Further, we also suggest to experimentally manipulate additional aspects related to community service. For example, community service could be compared to other types of programs involving social behavior, to make sure that community service is effective because of its specific characteristics (organized experiences connected to helping others in one's community or in the world) and not because of the characteristics it shares with other types of activities, such as the opportunity to practice social skills or the fact that it involves youth organized activities (e.g., Hansen, Larson, Dwarkin, 2003). Also different kinds of community service can be compared. In addition, social or environmental influences that may impact community service effects could be experimentally manipulated, such

as random assignment to teachers differing in their approach to adolescents' community service or reflection activities. This is because service effects may be influenced by teachers' characteristics, including their attitudes toward community service (McKay & Rozee, 2004), and by the quality of their teaching such as their ability to help adolescents connect reflection topics with their service experiences.

### **Practical implications**

What can policy makers and educational professionals learn from this thesis research? Our research findings indicate that when the goal is to stimulate adolescents' volunteering, it is first of all important to further specify this goal: whether the goal is to stimulate adolescents to start volunteering (independent of how often they do it), whether the goal is to make sure that adolescents spend more time in a volunteering activity, or to reach both of these goals. We advise to carefully reflect on the reasons for choosing one or both of these goals, as each has advantages as well as disadvantages. For example, from a developmental psychological-perspective, on the one hand it is important that as many adolescents as possible can profit from the positive effects volunteering can have on their development. This would plead to focus on stimulating adolescents to start volunteering. On the other hand, the extent to which adolescents actually profit from volunteering experiences may be limited, unless they have more frequent experiences. This would require a focus on stimulating frequent volunteering. There are also pro's and con's for both of these goals from a societal perspective. For example, on the one hand it is important for society to have more people volunteering. Especially as there seems to be a general trend of fewer people becoming responsible for the same amount of volunteering activities (Bekkers, 2013). For that reason, stimulating adolescents to start volunteering is important. On the other hand, organizations also need volunteers that commit themselves for longer periods of time, which makes it important to stimulate the frequency by which adolescents volunteer.

The choice of (one of) these goals, together with information on the age of the adolescents, determines which factors to target and possibly which tools to use in stimulating adolescents' volunteering. Interventions could both *directly* and *indirectly* target adolescents' volunteering. Community service combined with reflection can be an effective, *direct* way to stimulate volunteering (as it gives adolescents organized volunteering opportunities) and other domains of functioning. To make sure adolescents benefit from performing community service, it should be performed frequently and it should contain frequent reflection. Community service may also be more effective when adolescents reflect on academic topics, taught in courses that are part of the school curriculum (e.g., sociology). By applying these topics to their service experiences, adolescents may learn more about these topics. Moreover, by connecting community service to an academic course, adolescents may be better able to understand the meaning of their service experiences. In addition, it can be valuable to implement community service at the end of high school (for example in their pre-graduation year), as the older adolescents are, the more beneficial community service generally is. Further, community service can also be a cost-effective intervention, as implementing community service requires few resources and it benefits both adolescents'

performing the service and the community in which the service occurs (e.g., Melchior, 1998).

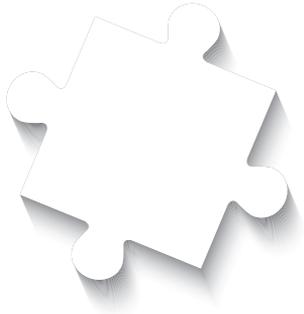
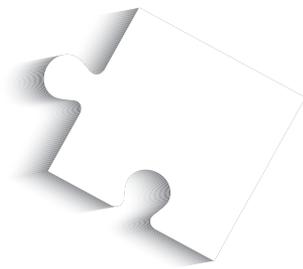
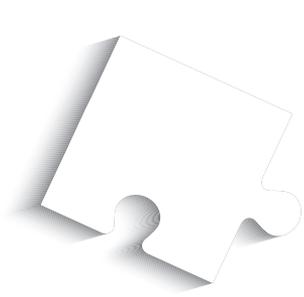
Interventions can indirectly target adolescents' volunteering by stimulating adolescents' personal development such as their identity development, or by targeting the civic activities and orientations of others who are part of adolescents' direct social environment, such as their friends and family. It could for example be valuable to make parents more aware that they can be civic role models for their children (by their volunteering and by their civic family orientation). Further, it is important to make parents realize that positive and open communication with their children is crucial if they want to be successful civic role models.

### **Conclusion**

In this thesis we demonstrated that both personal and social factors play a role in adolescents' volunteering. Their volunteering was stimulated by their identity, their parents' and friends' volunteering, the civic orientation of their family (combined with open communication), and by performing community service combined with reflection. This implies that adolescents' volunteering can both be indirectly stimulated, such as through the volunteering by their parents, and directly stimulated. Volunteering and other domains of adolescents' development can be directly stimulated by adolescents' participation in intensive community service programs combined with intensive reflection. Additionally, it is important to attune initiatives to stimulate adolescents' volunteering to the aspect of volunteering that is targeted (whether or how often adolescents volunteer) and to their age. Overall, this thesis shows that adolescents are concerned with more than "me, myself, and I". They do participate in their community (especially) when they are stimulated and get the right opportunities to do so.





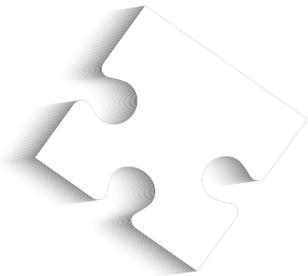


**References**

**Dutch summary (Nederlandse samenvatting)**

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## DUTCH SUMMARY

### (NEDERLANDSE SAMENVATTING)

#### Achtergrond

Een populaire opvatting die vaak in de media naar voren wordt gebracht is dat de huidige generatie adolescenten, die vaak “generatie mij” wordt genoemd, erg individualistisch is en weinig betrokken is bij anderen en de samenleving. Vanuit dit idee zou maatschappelijke betrokkenheid, ook wel “burgerschap” genoemd, (vrijwel) afwezig zijn bij adolescenten. Er zijn echter steeds meer empirische aanwijzingen die deze opvatting tegenspreken: adolescenten zouden wel degelijk de belangen van anderen overwegen en belangrijk vinden en (daarom) ook een grote potentie hebben tot maatschappelijke betrokkenheid. Bovendien blijkt dat een groot aantal jongeren zelfs al maatschappelijk betrokken is, met name in de vorm van vrijwilligerswerk. Minimaal een derde van de Nederlandse adolescenten zou wel eens vrijwilligerswerk doen. Met vrijwilligerswerk bedoelen we over het algemeen: “georganiseerde activiteiten en werkzaamheden die er op gericht zijn positief bij te dragen aan het milieu, individuen, groepen mensen, of de samenleving in zijn geheel zonder er betaald voor te krijgen (met uitzondering van een kleine onkostenvergoeding)”. Bij adolescenten gaat het hierbij voornamelijk om vrijetijds-gerelateerde activiteiten zoals het coachen van een voetbalteam, om zorg-gerelateerde activiteiten zoals huishoudelijke taken, en onderwijs-gerelateerde activiteiten zoals bijles geven. Daarnaast kan het soms ook gaan om politiek-gerelateerde activiteiten zoals het boycotten van producten of het demonstreren voor een bepaald (goed) doel.

#### De doelen van dit proefschrift

Over het algemeen kan gesteld worden dat een groot percentage adolescenten maatschappelijk betrokken is door middel van vrijwilligerswerk. Toch doet ook een groot deel van deze groep geen vrijwilligerswerk. Hoe kan dit verklaard worden? Of algemener: welke factoren zorgen ervoor dat adolescenten al dan niet vrijwilligerswerk gaan doen? En wanneer ze dit doen, welke factoren zorgen ervoor dat ze relatief weinig of veel tijd besteden aan vrijwilligerswerk? Het beantwoorden van deze vragen heeft niet alleen een theoretisch maar ook een praktisch belang: als we weten welke factoren een rol spelen bij het doen van vrijwilligerswerk, dan kunnen we mogelijk ook bepalen hoe we vrijwilligerswerk onder adolescenten kunnen stimuleren. Als meer adolescenten vrijwilligerswerk doen, komt dat de samenleving ten goede. Aan de andere kant is een belangrijke vraag of het doen van vrijwilligerswerk door adolescenten niet alleen ten goede komt aan de samenleving, maar ook aan (de ontwikkeling van) adolescenten zelf.

Dit proefschrift levert een bijdrage aan het beantwoorden van deze vragen. Het eerste doel van dit proefschrift was het bestuderen van de rol die persoonlijke en sociale factoren spelen bij het vrijwilligerswerk van adolescenten. Het tweede doel van dit proefschrift was om het effect van vrijwilligerswerk op de ontwikkeling van adolescenten te bestuderen.

### **De rol van persoonlijke en sociale factoren bij het vrijwilligerswerk van adolescenten**

In hoofdstuk 2 werd onderzocht of het vrijwilligerswerk van adolescenten verklaard kon worden uit twee persoonlijke kenmerken: hun morele ontwikkeling en hun identiteitsontwikkeling. We wilden weten of vrijwilligerswerk zou kunnen voortkomen uit een bepaald moreel besef, als iets wat het juiste is om te doen. Daarnaast wilden we weten of vrijwilligerswerk een uiting zou kunnen zijn van de identiteit die een adolescent heeft, als een uiting van wie iemand is. Om deze onderzoeksvragen te kunnen beantwoorden hebben we een grootschalig, cross-sectioneel vragenlijstonderzoek uitgevoerd onder 698 middelbare scholieren tussen de 12 en 20 jaar oud. De resultaten van ons onderzoek suggereerden dat de moraliteit en identiteit van adolescenten inderdaad een rol spelen bij het doen van vrijwilligerswerk. We vonden dat adolescenten die meer gemotiveerd waren om zich in te zetten voor het (morele) belang van anderen en de maatschappij, zich in meer verschillende situaties en omgevingen thuis voelden (zoals op school, thuis en tijdens hun vrijetijdsbesteding). Wanneer adolescenten zich in meer omgevingen thuis voelden, leken zij ook meer open te staan voor nieuwe activiteiten, zoals vrijwilligerswerk. We vonden hierbij de duidelijkste resultaten wanneer we de onderzochte groep adolescenten opsplitsten naar leeftijd en geslacht. Wanneer ze zich in meer omgevingen thuis voelden, bleken oudere adolescenten (16-19 jaar) vaker vrijwilligerswerk te doen (m.a.w. was er een grotere kans dat ze vrijwilligerswerk gingen doen) en jongere adolescenten (12-15 jaar) bleken, wanneer zij vrijwilligerswerk deden, meer tijd aan vrijwilligerswerk te besteden. Daarnaast vonden we alleen voor jongere adolescenten en jongens dat ze meer tijd besteedden aan vrijwilligerswerk wanneer zij een wat meer gedifferentieerde identiteit hadden. Een meer gedifferentieerde identiteit wil zeggen dat de manier waarop adolescenten zichzelf zien en gedragen niet in elke omgeving of situatie helemaal hetzelfde is. Deze bevinding zou kunnen betekenen dat jongere adolescenten het moeilijker vinden om nieuwe ervaringen zoals vrijwilligerswerk een plek te geven binnen hun (bestaande) identiteit; ze kunnen het gevoel hebben dat ze bijvoorbeeld tijdens het doen van vrijwilligerswerk anders zijn of zich anders gedragen dan wanneer zij op school of thuis zijn. Aan de andere kant zou een meer gedifferentieerde identiteit er juist ook voor kunnen zorgen dat jongere adolescenten eerder vrijwilligerswerk gaan doen, omdat ze nog meer op zoek zijn naar welke activiteiten bij hen passen en in welke omgevingen ze zichzelf prettig voelen.

In hoofdstuk 3 werd onderzocht welke rol de ouders en vrienden van adolescenten (de naaste omgeving) spelen bij het vrijwilligerswerk dat adolescenten verrichten. Voor het beantwoorden van deze onderzoeksvraag werd hetzelfde vragenlijstonderzoek gebruikt als beschreven in hoofdstuk 2. We vonden dat adolescenten vaker vrijwilligerswerk deden als een van beide ouders of hun beste vriend(in) vrijwilligerswerk deed. Zoals in hoofdstuk 2, vonden we opnieuw de duidelijkste resultaten wanneer we de onderzochte groep opsplitsen naar leeftijd. Bij jongere adolescenten speelden ouders en vrienden hierbij een even grote rol, maar bij oudere adolescenten waren vrienden belangrijker ten opzichte van ouders. Verder bleek ook dat alleen oudere adolescenten meer tijd aan vrijwilligerswerk besteedden wanneer het gezin meer interesse toonde en betrokken was bij de samenleving en daar open over communiceerde. De resultaten lijken erop te wijzen dat de rol die ouders en vrienden vervullen anders is bij

verschillende leeftijdsgroepen en anders is bij het gaan doen van vrijwilligerswerk dan bij de hoeveelheid tijd die aan vrijwilligerswerk wordt besteed.

### **Het effect van vrijwilligerswerk op de ontwikkeling van adolescenten**

Het tweede doel van het proefschrift was meer inzicht te krijgen in de effecten van vrijwilligerswerk op de ontwikkeling van adolescenten. Met dit doel onderzochten we het effect van vrijwilligerswerk en de *maatschappelijke stage*. De maatschappelijke stage is een veelvuldig toegepast onderdeel binnen internationale onderwijscurricula waarbij wordt getracht maatschappelijke betrokkenheid te bevorderen door leerlingen vrijwilligerswerk te laten uitvoeren. In Nederland is een 30-urige maatschappelijke stage sinds het schooljaar 2010/2011 een verplicht onderdeel in het voortgezet onderwijscurriculum.

Naast het bestuderen van de effectiviteit van vrijwilligerswerk, was het doel om meer inzicht te krijgen in werkzame elementen van vrijwilligerswerk. Bij het bestuderen van deze werkzame elementen richtten we ons met name op de rol van reflectie. In de literatuur wordt vaak gedacht dat reflecteren op het vrijwilligerswerk of daaraan gerelateerde onderwerpen erg belangrijk is. Het zou er namelijk voor zorgen dat adolescenten de ervaringen en de kennis die ze opdoen tijdens het vrijwilligerswerk beter verwerken en er als gevolg meer van leren en het vrijwilligerswerk als betekenisvoller ervaren. In dit proefschrift is onderzocht of er ook empirische evidentie is voor het belang van reflectie bij de effectiviteit van vrijwilligerswerk.

In hoofdstuk 4 is door middel van een meta-analyse het effect van de maatschappelijke stage op de ontwikkeling van adolescenten onderzocht. Hierbij is ook gekeken naar het belang van reflectie bij het realiseren van deze effecten. Een meta-analyse is een type studie waarbij de data van eerdere studies die gelijksoortige gegevens bevatten bij elkaar worden gevoegd en geanalyseerd. In dit geval ging dat om empirische gegevens over het effect van de maatschappelijke stage op adolescenten. Een groot voordeel van zo'n meta-analyse is dat de gevonden resultaten beter gegeneraliseerd kunnen worden, bijvoorbeeld naar verschillende landen en adolescenten met verschillende kenmerken, en daarmee betrouwbaardere uitspraken gedaan kunnen worden over de gevonden effecten.

Uit de resultaten van onze meta-analyse, gebaseerd op 49 studies, bleek dat de maatschappelijke stage kleine tot gemiddelde, positieve effecten heeft op alle onderzochte uitkomsten: academisch- (bijv. schoolmotivatie), persoonlijk- (bijv. zelfvertrouwen), sociaal- (bijv. hoe je aankijkt tegen verschillende groepen in de samenleving) en maatschappelijk-gerelateerde uitkomsten (bijv. het gaan doen of blijven doen van vrijwilligerswerk). Reflectie bleek een belangrijke voorwaarde te zijn voor de effectiviteit van de maatschappelijke stage. De maatschappelijke stage had een substantieel positief effect op adolescenten wanneer de stage gestructureerde reflectie bevatte. Het effect van de stage was verwaarloosbaar wanneer deze geen reflectie-element bevatte. Ook bleek een hoge intensiteit van reflectie belangrijk te zijn, met name in combinatie met intensieve stage ervaringen. Verder leek reflecteren op academische competenties en onderwerpen belangrijk, zoals onderwerpen voor het vak

maatschappijleer. Dit laatste zou erop kunnen wijzen dat effecten van de maatschappelijke stage groter zijn als de stage wordt geïntegreerd binnen een bepaald schoolvak.

Een kanttekening bij deze bevindingen is dat de onderzoeks-designs van de onderzochte studies zich er niet voor leenden om de causale rol van reflectie (m.a.w. de invloed van reflectie) vast te stellen omdat het reflectie element niet random (gebaseerd op toeval) werd toegewezen aan de onderzochte groepen. Deze bevindingen moeten daarom met enige voorzichtigheid worden geïnterpreteerd. Naast het belang van reflectie, lijkt de leeftijd van adolescenten ook een rol te spelen bij de effectiviteit van de maatschappelijke stage: oudere adolescenten lijken meer gebaat bij de maatschappelijke stage dan jongere adolescenten. Tot slot leek het soort vrijwilligerswerk, namelijk of het gedaan werd voor kwetsbare mensen en het voorzag in belangrijke levensbehoeftes (bijv. eten, onderdak), geen invloed te hebben op het effect van de maatschappelijke stage en leken jongens en meisjes evenveel gebaat bij het doen van vrijwilligerswerk.

In hoofdstuk 5 is het effect van reflectie en de maatschappelijke stage op het vrijwilligerswerk en de morele en identiteitsontwikkeling van adolescenten onderzocht binnen de Nederlandse context onder ongeveer 458 middelbare scholieren tussen de 14 en 16 jaar oud. Om het effect van de maatschappelijke stage te bestuderen en de manier waarop deze effecten bewerkstelligd worden te onderzoeken, vergeleken we twee groepen adolescenten met elkaar: een groep die wel een maatschappelijke deed en een groep die nog geen maatschappelijke stage deed. Om ook het belang van reflectie tijdens de maatschappelijke stage te bestuderen, kreeg de helft van de adolescenten die stage liepen ook een lesprogramma toegewezen waarin ze reflecteerden op hun maatschappelijke stage (de andere helft kreeg geen lesprogramma). Ze reflecteerden met name over identiteits-gerelateerde aspecten van hun stage, zoals wat ze over zichzelf hadden geleerd tijdens de stage, en over de morele aspecten van hun stage, zoals hoe ze met hun stage activiteiten anderen konden helpen. Het lesprogramma werd op basis van random toewijzing (d.m.v. toeval) toegekend, zodat de invloed van reflectie op het effect van de maatschappelijke stage kon worden vastgesteld. Uit de resultaten van het onderzoek kwam naar voren dat adolescenten die een maatschappelijke stage hadden gelopen, na afloop meer tijd besteedden aan vrijwilligerswerk dan adolescenten die geen stage hadden gedaan. Vooral de maatschappelijke stage ervaringen leken voor deze toename in vrijwilligerswerk te zorgen, al was er ook enige indicatie dat reflectie het effect van de maatschappelijke stage versterkte. De maatschappelijke stage had geen effect op de morele ontwikkeling en identiteitsontwikkeling van adolescenten. Verder vonden we voor adolescenten die het lesprogramma kregen een verband tussen hun identiteitsontwikkeling en vrijwilligerswerk, dat sterker werd wanneer ze meer uren stage liepen. Tot slot vonden we dat er een grotere kans was dat adolescenten vrijwilligerswerk gingen doen als ze meer uren stage hadden gelopen.

### **Conclusie en praktische implicaties**

In dit proefschrift hebben we aangetoond dat zowel persoonlijke als sociale factoren een rol spelen bij het vrijwilligerswerk van adolescenten. We vonden aanwijzingen dat het vrijwilligerswerk van jongeren wordt gestimuleerd door hun identiteitsontwikkeling, door

het vrijwilligerswerk van hun vrienden en ouders, door de betrokkenheid en interesse van het gezin bij de gemeenschap en door het lopen van een maatschappelijke stage met gestructureerde reflectie. Dit impliceert dat het vrijwilligerswerk van jongeren zowel indirect als direct gestimuleerd kan worden. Een voorbeeld van een indirecte manier om het vrijwilligerswerk van jongeren te stimuleren is het bewust maken en stimuleren van de maatschappelijke voorbeeldfunctie die het gezin, ouders en vrienden vervullen (bijv. door het vrijwilligerswerk dat zij doen). Een directe manier om het vrijwilligerswerk van adolescenten als ook andere domeinen van hun functioneren te stimuleren, is hen kennis te laten maken met georganiseerde vrijwilligersactiviteiten binnen de maatschappelijke stage en hen hierover op een gestructureerde manier te laten reflecteren. Daarnaast lijkt het belangrijk om initiatieven om vrijwilligerswerk bij adolescenten te stimuleren af te stemmen op de leeftijd van de adolescenten en het aspect van vrijwilligerswerk waar het om gaat. Met andere woorden: gaat het om het stimuleren van het starten van vrijwilligerswerk, de tijd die aan het vrijwilligerswerk besteed wordt, of beiden.

Resumerend laat dit proefschrift zien dat adolescenten met meer bezig zijn dan alleen maar met “mij, mezelf en ik”. Ze participeren wel degelijk in de samenleving (zeker) wanneer zij hierin gestimuleerd worden en de juiste mogelijkheden krijgen om maatschappelijk betrokken te zijn. Daarnaast lijkt maatschappelijke betrokkenheid in de vorm van vrijwilligerswerk ook hun eigen ontwikkeling ten goede te komen.



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## CURRICULUM VITAE

Anne van Goethem was born on February 2nd, 1984 in Hulst, the Netherlands. After finishing secondary education at the Reynaertcollege in Hulst, she studied Psychology and Philosophy and attended the Honors program at the Radboud University Nijmegen. In 2007, she received her Philosophy Bachelor degree and her Honors program certificate. In 2008, she graduated cum laude from the Master Clinical Psychology and graduated bene meritum from the Research Master Behavioral Science.

In 2008, Anne started her PhD project on adolescent volunteering at the department of Developmental Psychology at Utrecht University with dr. Anne van Hoof, prof. dr. Marcel van Aken, and prof. dr. Bram Orobio de Castro as supervisors. This resulted in her doctoral thesis titled “Me, myself, and my Community. Antecedents, Processes, and Effects of Adolescent Volunteering”.

As a PhD-candidate, Anne also took part in a number of international activities. She organized and participated in several international conferences, she was selected to attend an international summer school on meta-analysis (2009), and she received a travel grant from the journal “Kind en Adolescent” to visit and collaborate on a joint paper with prof. dr. Daniel Hart at the Rutgers University in Camden (2013). In addition to conducting research, Anne taught various courses and supervised various theses, she was board-member of the PhD council for Psychology (2009-2010), and she was co-chair of the PhD council for the Department of Developmental Psychology (2012-2013).

Currently, Anne is working as a postdoctoral researcher at the department of Pedagogical and Educational studies at the University of Amsterdam. She works on a project in which she studies the effects of school on adolescents’ civic competence and behavior.

