Children’s Acquisition of Values within the Family: Domains of Socialization Assessed with Autobiographical Narratives

by

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Abstract

The transmission and internalization of values are the primary processes that occur during socialization. A recent approach integrates existing theories and research findings into a comprehensive model of socialization. According to the domains of socialization approach, there is no general principle governing socialization but rather it occurs in different domains of caregiver-child interactions. Grusec and Davidov (2010) outlined five socialization domains, which involve controlling children’s behaviour by external means (control domain), protecting children from harm and relieving their distress (protection domain), teaching children information or skills outside of the discipline or distress setting (guided-learning domain), managing children’s environment to increase desirable role models (group participation domain), and accommodating each other’s wishes (mutual reciprocity domain). Previous work demonstrated the utility of the domains of socialization approach for the study and understanding of value acquisition (Vinik, Johnston, Grusec, & Farrell, 2013). The present study expanded on this work by focusing on processes within the family. A modified narrative methodology was used to explore aspects of the value acquisition process. Autobiographical narratives of 294 emerging adults about a time they learned an important value from a caregiver were analyzed.
The sample included participants from four ethnic backgrounds. Findings provided further support for the usefulness of the domains of socialization approach to the study of value development, as events recalled in narratives were categorized into all domains but reciprocity. Values learned in the control domain were most frequently reported but were associated with the lowest levels of internalization. The highest level of value internalization was found to occur in the group participation domain, drawing attention to the importance of observing the behaviour of others. Socialization domains were associated with particular types of lesson content. The guided learning and group participation domains were associated with more positive and less negative emotional valence compared to the other domains. In turn, absence of negative valence was significantly related to better confidence in accuracy of memory reported in narratives, indicative of quality of information processing and learning. Most effects were not moderated by demographic variables providing support to the universal applicability of the domains of socialization approach.
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# Table of Contents

Abstract ................................................................................................................................. ii  
Acknowledgements ................................................................................................................ iv  
Tables of Contents .................................................................................................................. v  
List of Tables .......................................................................................................................... viii  
List of Figures ........................................................................................................................ ix  
List of Appendices ............................................................................................................... x  
Introduction ............................................................................................................................. 1  
   Value Internalization: A Definition .................................................................................. 3  
   Emerging Adulthood and Value Development ............................................................... 4  
   Personal Narrative as a Method for Studying Value Learning and Internalization ...... 5  
   An Historical Overview of Value Internalization Theory and Research ..................... 7  
       Psychoanalytic approach ......................................................................................... 8  
       Social learning approach ...................................................................................... 8  
       Hoffman’s analysis of parental discipline ............................................................ 10  
       Attributional approach ......................................................................................... 11  
       Parenting styles ................................................................................................... 12  
       Observational learning ......................................................................................... 13  
       Attachment theory ............................................................................................... 14  
       Mutual reciprocity perspective .......................................................................... 14  
   Domains of Socialization Approach ............................................................................ 15  
       Control domain .................................................................................................. 17  
           Factors impacting value learning ................................................................. 18  
       Protection domain ............................................................................................... 20  
           Factors impacting value learning ................................................................. 20  
       Group participation domain ................................................................................ 21
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors impacting value learning</td>
<td>21</td>
</tr>
<tr>
<td>Guided learning domain</td>
<td>22</td>
</tr>
<tr>
<td>Factors impacting value learning</td>
<td>22</td>
</tr>
<tr>
<td>Mutual reciprocity domain</td>
<td>23</td>
</tr>
<tr>
<td>Factors impacting value learning</td>
<td>24</td>
</tr>
<tr>
<td>Content of values within socialization domains</td>
<td>24</td>
</tr>
<tr>
<td>Source of lesson and socialization domains</td>
<td>26</td>
</tr>
<tr>
<td>Cultural variation in socialization domains</td>
<td>27</td>
</tr>
<tr>
<td>Present Study</td>
<td>29</td>
</tr>
<tr>
<td>Research Questions and Summary of Hypotheses</td>
<td>29</td>
</tr>
<tr>
<td><strong>Method</strong></td>
<td>31</td>
</tr>
<tr>
<td>Participants</td>
<td>31</td>
</tr>
<tr>
<td>Measures</td>
<td>34</td>
</tr>
<tr>
<td>Narrative</td>
<td>34</td>
</tr>
<tr>
<td>Coding of narratives</td>
<td>34</td>
</tr>
<tr>
<td>Domain in which child was operating</td>
<td>35</td>
</tr>
<tr>
<td>Lesson source</td>
<td>41</td>
</tr>
<tr>
<td>Lesson content</td>
<td>42</td>
</tr>
<tr>
<td>Meaningful processing</td>
<td>43</td>
</tr>
<tr>
<td>Narrative coherence</td>
<td>44</td>
</tr>
<tr>
<td>Narrative-related variables that did not require coding</td>
<td>45</td>
</tr>
<tr>
<td>Reason for successful learning</td>
<td>45</td>
</tr>
<tr>
<td>Emotional valence of event</td>
<td>46</td>
</tr>
<tr>
<td>Confidence in accuracy of memory reported</td>
<td>46</td>
</tr>
<tr>
<td>Procedure</td>
<td>47</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td>47</td>
</tr>
</tbody>
</table>
Overview of Analyses ................................................................. 47
Preliminary Analyses ........................................................................... 48
Distribution of Socialization Domains in Narratives............................... 49
Socialization Domains in Narratives and Demographic Variables............... 51
Socialization Domains and Age of Child at the Time of Value-Learning........ 52
Socialization Domains and Lesson Source in Narratives ....................... 54
Socialization Domains and Lesson Content in Narratives ..................... 56
Domains in Narratives and Value Internalization.................................. 60
Domains in Narratives and Emotional Valence of Recalled Event ............. 64
Emotional Valence and Confidence in Accuracy of Memory Reported......... 65
Socialization Domains and Narrative Coherence ................................ 66
Summary of Results ............................................................................ 66

Discussion ......................................................................................... 68
Socialization Domains within Narratives ........................................... 70
Socialization domains and demographic variables .............................. 73
Emotional valence of socialization domains ....................................... 74
Lesson Source .................................................................................. 75
Lesson Content ................................................................................ 76
Socialization Domains and Value Internalization .................................. 80
Narrative Coherence .......................................................................... 83
Practical Implications for Parenting and Value Socialization............... 83
Limitations and Future Directions ..................................................... 83
Conclusions ....................................................................................... 85

References ......................................................................................... 87
List of Tables

Table 1  Chi-square Analyses of Simple Relations between Study Variables .................. 49

Table 2  Frequencies and Percentages of Socialization Domains Described in Narratives .. 50

Table 3  Mean Age at Time of Event Described in Narrative .......................................... 54

Table 4  Frequencies and Percentages of Lesson Source .................................................. 55

Table 5  Frequencies and Percentages of Lesson Content ............................................... 58

Table 6  Frequencies and Percentages of Reason for Successful Learning ..................... 63
List of Figures

Figure 1  Frequency Distribution of Socialization Domains in Four Ethnic Background Groups..............................................................51

Figure 2  Proportions of Content of Lessons within Each Domain.................................59

Figure 3  Proportions of Ethnic Background within Each Lesson Content...........................60

Figure 4  Proportions of Domains within Each Reason for Successful Learning ...............64
List of Appendices

Appendix A. Ethnic Background Inclusion Criteria..................................................103

Appendix B. Vancouver Acculturation Measure.....................................................104

Appendix C. Narrative Prompt and Follow-up Questions..........................................107

Appendix D. Participant Informed Consent Form.....................................................110

Appendix E. Participant Debriefing Form...............................................................112

Appendix F. Research Assistant’s Instructions.......................................................115
CHILDREN’S ACQUISITION OF VALUES WITHIN THE FAMILY: DOMAINS OF SOCIALIZATION ASSESSED WITH AUTOBIOGRAPHICAL NARRATIVES

Introduction

The acquisition of values is one of the main purposes of the socialization process. Children are born immature and largely unprepared to function in their environment for both biological and social reasons. Therefore, it is the role of the community at large, and caregivers in particular, to socialize their young to become well-functioning members of society. In general terms, socialization is a process during which more experienced members of a social group assist younger and less experienced members in adopting values, norms, and customs of their society (Grusec & Davidov, 2007). The process of value socialization was the focus of the current study. Particularly, of interest was the way in which children learn values from their care-givers.

Socialization of children, and thus acquisition of values, can occur in different contexts, such as the family, school, and peer settings (Gecas, 1990; Harris, 1995; Harris, 1998; Piaget, 1948). However, it has been demonstrated that the family plays a central role in shaping children (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000) and, in most societies, socialization of children is considered the responsibility of the family. Members of one’s immediate family, and particularly parents, are biologically primed to care and protect their young. In addition, family members are in the best position, from a practical standpoint, to fulfil this role because of close proximity to the child as well as control of necessary resources (Bugental & Grusec, 2006; Grusec & Davidov, 2007). Therefore, the present study examined the process of value acquisition specifically within the family unit.
To do this, young adults were asked to provide a narrative about a time when they learned an important value or lesson from someone who raised them.

Socialization of values by primary care-givers has been a topic of interest and investigation for many decades, with different theories and findings emerging from several lines of research. A more recent approach to socialization is one that integrates these lines of research into a comprehensive model. According to this approach, socialization is a complex process that occurs in several domains of care-giver-child interactions, namely control, protection, guided learning, group participation, and mutual reciprocity domains (Grusec & Davidov, 2010). The general goal of the present research was to evaluate the usefulness and applicability of the domains of socialization approach to the study of value acquisition within the family. More specifically, it explored whether values are indeed reported to be learned within the context of all the domains described by this approach and whether some domains are mentioned more frequently than others in situations of value-learning. The study also investigated whether the content of learned values and lesson sources (e.g., mothers vs. fathers) differed amongst the domains. The study’s central goal was to examine whether some domains of socialization were associated with higher levels of value internalization (that is, acceptance of the value as inherently correct) than others. Relevant to this question, the emotional valence associated with each domain was investigated as well as its relation to the narrative writer’s confidence in the accuracy of the events described (as a marker for quality of information processing). Lastly, the study addressed whether any of these processes were moderated by demographic variables, specifically, the individual’s ethnic background, acculturation level, age, and sex.

When discussing value acquisition and internalization, it is important to consider the active role of the learner. Children do not passively receive their care-givers’ unchanged
values but rather actively construct and reconstruct them (Grusec, 2006; Kuczynski, 2003). Thus, the child’s perspective on the value learning situation is of paramount importance to the understanding of this learning process. A personal narrative methodology is specifically suited for the investigation of the learner’s perspective. Therefore, an adapted version of the McAdams’ narrative method (McAdams, 2001) was used in this study. Specifically, autobiographical narratives of emerging adults about a situation when they successfully learned an important value from their primary care-givers were analysed.

In the section that follows, I will begin with defining value internalization followed by a description of the narrative methodology as a tool for studying value acquisition and internalization. I will then provide an historical overview of value internalization theory and research. A description of the domains of socialization approach, which forms the theoretical basis for this study, will follow. Lastly, the current study and its hypotheses will be discussed.

**Value Internalization: A Definition**

Internalization is one of the main goals of the socialization process. For the purpose of this study, internalization is conceptualized within the context of the Self Determination Theory (Grolnick, Deci, & Ryan, 1997) and defined as “the process by which individuals acquire beliefs, attitudes, or behavioral regulations from external sources and progressively transform those external regulations into personal attributes, values or regulatory styles.” (p. 139). This occurs when individuals accept and adopt values and, therefore, perceive them as self-generated. For internalization to occur, values should not be taken in passively, but rather examined, evaluated, and even questioned (Kroger, 2003). Values that are internalized in this manner are fully integrated into the self, have personal meaning, and are therefore congruent with the individual’s overall value system. These values elicit willing behaviour,
rather than behavior due to external pressures, such as fear of negative consequences or expectation of reward (Deci & Ryan, 2000; Grusec & Davidov, 2007). Thus, the individual’s motivation for behaviour is of paramount importance.

Self Determination Theory’s continuum of internalization levels describes the different motivations that can underlie behaviour (Grolnick et al., 1997). At the lowest end of this continuum is behaviour that is fully regulated by external contingencies, as described above. The second level of internalization is motivated by introjected regulation, where externally imposed ideals have been adopted but have not been modified or integrated into a congruent self. A third form of regulation is termed identification, where the value is of personal importance to the individual. The highest level of internalization is considered to be achieved through full integration of the value into other aspects of the self, thereby forming a coherent and unified system of values. This is usually achieved by deep cognitive engagement and questioning of the issues involved. Measures of internalization of the specific values described by participants in their narratives were used in the current study.

**Emerging Adulthood and Value Development**

Erikson defined the developmental stage of adolescence as the time when individuals begin to construct a unitary sense of the self to form a coherent personal identity (Erikson, 1968). As adolescents develop a more sophisticated and stronger sense of personal identity into young adulthood, their values become integrated into and central to their self-understanding (Blasi, 2004). Indeed, emerging adulthood is increasingly being considered as a stage of rapid development, with documented significant changes in personality and identity (Roberts, Walton, & Viechtbauer, 2006). Roberts, Walton and Viechtbauer argue that, while adolescence is a time for identity exploration, it is during the stage of emerging adulthood that personal qualities become consolidated through experiences with the realities
of life. Thus, emerging adults were chosen as the population of interest for this study because, at this point of development, systems of values and morals have become relatively well-constructed (Hardy & Carlo, 2011).

**Personal Narrative as a Method for Studying Value Learning and Internalization**

The process of identity consolidation described above happens along with the development of a personal life narrative in late adolescence (Habermas & Bluck, 2000). Thus, McAdams (2001) argued that this convergence enables the study of identity through autobiographical stories. McAdams (2006) considers the life story as an “internalized and evolving cognitive structure or script that provides an individual’s life with some degree of meaning and purpose.” (p. 11). There is evidence that measures of identity development are associated with indices of personal life story development during this period (McLean & Pratt, 2006). Therefore, autobiographical narratives can provide a lens, through which aspects of personality and development can be studied.

McAdams and his colleagues (2008) view autobiographical narratives that recount life experiences as an important source of information about individuals’ values and beliefs as well as the episodes through which these values have become internalized. The narrative method has been widely used in studies of personality and identity development (McLean & Pasupathi, 2006; McLean & Pratt, 2006). In these studies, participants are prompted to produce a narrative about themselves or a defining event in their lives, which are then analyzed for markers of personality and identity.

Studies indicate that individuals with different values (e.g., moral exemplars) produce different content in their narratives (Colby & Damon, 1992). For example, narratives of individuals who possess a strong commitment to helping others were found to have more prosocial content (Matsuba & Walker, 2005). The personal narrative procedure has also been
used successfully to investigate experiences of value learning within the family. As one example, Pratt, Norris, Hebblethwaite and Arnold (2008) analyzed narratives produced by adolescents for the source of value learning (with parents mentioned significantly more frequently than grandparents) as well as particular characteristics of the narrative (e.g., specific event described versus general descriptions, presence of caring themes, and acceptance or rejection of value by the writer). Another line of research has investigated the presence of parental voice within adolescents’ narratives about value acquisition within the family (Pratt, Arnold, & Lawford, 2009). Parental voice was considered important because it provided insight into aspects of the family’s organization from the point of view of the adolescent (e.g., family generativity). Particularly, the process of gradual internalization of parental voice was of interest.

Other characteristics of narratives that are commonly studied are meaning-making and coherence. In the context of narrative identity studies, meaning-making refers to the extent to which individuals report learning lessons and gaining insight from their life experiences in order to explain how past events had influenced aspects of the self (Habermas & Bluck, 2000; McLean & Thorne, 2003). This deep personal engagement with the content of the event described in the narrative is highly akin to the type of processing required for value internalization, as outlined by the Self Determination Theory. Therefore, for the purpose of the current study, presence of meaning making within the narrative was used as a measure of value internalization.

Coherence of narrative is seen as an indication of the individual’s sense of unity across time and situations (McLean & Pratt, 2006). Baerger and McAdams (1999) reconciled the different definitions of coherence available in the literature into a single model, which includes four dimensions. The first dimension, orientation, refers to the extent to which the
individual places the characters and action in a specific context or setting within the narrative. *Structure* describes the extent to which the narrative follows a temporal sequence of goal oriented action. The *affect* component denotes the extent to which the story expresses emotion in a clear and understandable way. Finally, integration refers to the individual’s ability to link events described in the narrative to the larger sense of self. Coherence of personal narratives has been found to be related to a variety of outcomes, such as self-reported psychological well-being (Baerger & McAdams, 1999) and lower levels of psychopathology. In the present study, narrative coherence was also examined.

A modified version of the narrative methodology was used in the present study, where participants produced autobiographical narratives about an event when they learned an important value from someone who raised them. In addition, participants answered follow-up questions about the event they described in the narrative to ensure that the information required for coding the variables of interest was provided. While the main coding categories were predetermined and included the domain in which the child was operating, source of the lesson, and lesson content, the subcategories of each coding variable were determined based on the recurrent themes that emerged from the narratives. Therefore, the narrative method was particularly suited to the current study because the open-ended nature of the required response did not constrain participants to specific predetermined content, but rather allowed for data-driven exploration of themes and concepts.

**An Historical Overview of Value Internalization Theory and Research**

A number of theories have been proposed and tested regarding the principles that govern children’s socialization in general and value acquisition in particular. The great majority of these approaches focus on parental disciplinary responses to children’s misbehaviour, while only a few discuss factors outside of the disciplinary setting. This
section provides an historical overview of these various approaches, beginning with those focused on the disciplinary context.

**Psychoanalytic approach.** The first comprehensive theoretical formulation of socialization was offered by Freud. The description of the psychosexual stages of development provided the framework for understanding moral development. Psychoanalytic theory views the child as a hedonistic being with aggressive and sexual impulses (Freud, 1965). Children are believed to experience frustration and resentment due to parental attempts to correct their behaviour to be more in line with societal demands. However, children are reluctant to express this hostility towards their parents due to a fear of abandonment. As a result, these feelings must be repressed. The repression is achieved and maintained by identifying with and adopting parental values and expectations. This notion of internalization is one of Freud’s most enduring contributions. Freud’s version of internalization, however, implied the adoption of unmodified parental values.

Through this process of identification with the parents, children adopt their use of prohibitions and punishment in response to misbehaviour, which is then transformed into self-punishment and guilt. Guilt avoidance becomes the mechanism by which children conform to values and societal standards (Hoffman, 1970a). Psychoanalytic theory offered a rich conceptualization of human behaviour in general and internalization of values in particular, which laid the groundwork for further elaboration. However, it lacked scientific rigor.

**Social learning approach.** The social learning approach combined psychoanalytic ideas with empirically-supported behavioural principles, thereby producing a theory that addressed the complexities of human behaviour and could be tested scientifically. This approach offered several theories of children’s internalization of values. Mowrer (1960), for
example, suggested that the repeated punishment of unwanted behaviour results in conditioned fear in children. The only way a child is able to avoid this unpleasant fear is by suppressing the unwanted behaviour and resisting temptation. Mowrer also described a mechanism that accounted for the difference between the development of resistance to temptation and guilt. Specifically, he suggested that punishment administered at the beginning of the misbehaviour leads to resistance to temptation in the future, whereas punishment delivered during or after the misdeed results in feelings of guilt (Mowrer, 1960).

While this approach received some support in animal studies (Solomon, Turner, & Lessac, 1968), it could not account for the relatively permanent change in behaviour that continues after the pairing of response and punishment is discontinued.

Social learning theory was taken in a slightly different direction by Sears and his colleagues, who focused on the concept of conscience development. They argued that the child has a desire to imitate positive features of the parent because these features acquire secondary or learned reinforcement value by being paired with the primary reinforcement of the parent satisfying the child’s basic need (e.g., hunger) (Sears, Whiting, Nowlis, & Sears, 1953). Since parents are associated with the satisfaction of primary drives, they now acquire secondary reinforcement value, by which the behaviour of being like the parent also becomes reinforcing for the child. Thus, Sears’ proposed theory of identification, which originated in psychoanalytic theory, was based fully on learning principles.

It was Sears and his colleagues who conducted the first large scale empirical study addressing the internalization of values (Sears, Maccoby, & Levin, 1957). This study included the assessment of a number of variables relevant to socialization, such as discipline techniques, and child outcomes indicative of conscience development. It was observed that
children move along a continuum of need for external control to reduce misdeeds, beginning with the need for constant supervision and active intervention on the part of the caregiver to self-control motivated by fear of consequences or expectation of reward and eventually to self-motivated control of their own behaviour. As such, Sears et al. concluded that internalization of values was evident when children complied with the value in the absence of obvious external pressure.

Sears et al. (1957) were also the first to identify specific discipline techniques, thereby setting the stage for contemporary approaches to the study of discipline effectiveness. They suggested that love-oriented discipline techniques, such as praise, social isolation and withdrawal of affection, lead to higher levels of internalization in children than object-oriented techniques, such as tangible rewards, deprivation of material privileges, and physical punishment. Sears et al. found empirical support for this argument, showing that when mothers used love withdrawal in the context of warm and nurturing responding, their children exhibited more self-control, developed their own standards of conduct, and accepted responsibility for their own misdeeds.

**Hoffman’s analysis of parental discipline.** One of the most influential theories of parental contribution to children’s acquisition of values was provided by Hoffman (Hoffman, 1970b). Following an extensive review of the literature, he distinguished between three main types of disciplinary strategies in response to children’s misbehaviour: power assertion (e.g., spanking), love withdrawal (building on Sears et al., 1957) (e.g., verbal disapproval), and induction (i.e., providing an explanation). He then demonstrated through an extensive review of empirical studies that induction (either alone or in combination with power assertions) is the disciplinary method most likely to lead to internalization of parental values. With the
provision of reasoning by their parents, children are able to understand the rationale behind rules and values and thus stop viewing them as external or arbitrary impositions. Hoffman also distinguished between self-oriented and other-oriented reasoning, with the latter being the most effective. Such explanations draw children’s attention to the effects of their actions on others.

**Attributional approaches.** Attribution theory provided the mechanism that accounted for the effectiveness of reasoning over power assertion for successful value internalization. Freedman (1965), for example, had demonstrated that mild punishment was more effective than severe punishment in producing compliance with a prohibition in the absence of surveillance. This finding was later explained by the minimal sufficiency principle (Nisbett & Valins, 1987). This principle is based on the assumption that people unconsciously look for reasons to explain their own behaviour. When an action is done in the context of obvious external pressure, such as the threat of severe punishment, the action is attributed to external reasons. In this case, the behaviour will not be maintained in the absence of this external pressure. When the action is done in the absence of obvious external pressure, such as in the case of explanation, a person attributes the act to internal factors, such as their beliefs and motivation. Therefore, in the context of childrearing, methods most effective in promoting internalization of values would be those that apply the minimum pressure required to induce compliance but not so much that children would attribute their behaviour to external factors. In the absence of such external explanations, children would then attribute their actions to their internal value system. A number of studies provided support for the attributional perspective and minimal sufficiency principle (Grusec & Redler, 1980).
Parenting styles. Whereas Sears and Hoffman considered specific discipline techniques, other researchers focused on typologies of parenting styles. Becker (1964), for example, proposed two major dimensions of parenting: warmth-hostility and restrictiveness-permissiveness. Parents high on warmth and restrictiveness were considered most effective in raising compliant and internalized children, while those high in warmth and permissiveness were seen to be effective in producing independent and creative children. Several years later, Baumrind (1971) proposed a slightly different typology, with three parenting styles: authoritarian, authoritative, and permissive. Authoritarian parents are those who demand strict obedience without consideration of the child’s point of view. Authoritative parents also set firm controls on the children’s behaviour but are willing to be flexible and take into account their children’s point of view. Finally, permissive parents make few demands of their children and rarely take any disciplinary action.

Maccoby and Martin (1983) extended this typology by introducing a two-dimensional classification of parenting patterns, which includes control and responsiveness. The four combinations of these dimensions describe the three parenting styles outlined above and a fourth neglecting/rejecting style (low control and low responsiveness). The authoritative parenting style (high control and high responsiveness) was demonstrated to lead to the highest level of internalization of values in children (Steinberg, Elmen, & Mounts, 1989; Steinberg, Mounts, Lamborn, & Dornbusch, 1991).

All the perspectives described above focus on interactions where the child misbehaves and the parent takes the role of the authority figure who must correct or control the child through disciplinary action. The following section describes approaches that focus on other types of parent-child interactions.
**Observational learning.** Bandura and Walters worked in the social learning tradition but later broke away from that perspective, offering an entirely different theory of learning. In their book, *Social Learning and Personality Development*, they argued that human behaviour was too complex to be accounted for only by reinforcement and acquired drives (Bandura & Walters, 1963). Their sociobehaviorist approach brought attention to the social nature of humans, suggesting that imitation is the most basic form of learning. Indeed, observational learning could better account for the acquisition of novel responses than learning through reinforcement, as it was demonstrated that observational learning occurs without anticipation of reward. Bandura demonstrated observational learning processes as the underlying mechanisms in the development of a wide variety of moral behaviours such as resistance to temptation and delay of gratification (Bandura & Huston, 1961; Bandura, Grusec, & Menlove, 1966; Bandura et al., 1966; Bandura, 1977a). The evidence from this line of research was compelling. Studies demonstrated that observation of models not only leads to learning of novel responses, but also changes previously learned behaviours. In addition to behavioural outcomes, moral judgment and decision making was also shown to be affected by imitation (Bandura & McDonald, 1963).

Bandura offered a different explanation than Sears (Sears et al., 1957) for children’s shift from external to internal control of behaviour. Specifically, he suggested that children imitate the various reactions they observe in their caregivers in response to their own behaviour. In addition, children also imitate the adoption of self-evaluative standards, which then renders external intervention unnecessary. Lastly, Bandura also differed in the way he perceived the nature of value transmission. Instead of viewing it as a passive process, where values of the socialization agents are absorbed, he suggested that children play an active role
in choosing which models to imitate (depending on perceived competence) and which values and activities to imitate (depending on the personal importance placed on the particular behaviour) (Bandura, 1977b).

**Attachment theory.** Attachment theory emerged from an evolutionary perspective, according to which the relationship between parents and offspring took shape in a way that would facilitate the survival of the young (Bowlby, 1980). As such, both parents and children are biologically primed to seek proximity to each other, which would facilitate the protection of the offspring. This need for proximity was viewed as a learned dependency drive by social learning theorists (Sears et al., 1957). In addition, compliance with parental requests is also viewed as facilitating protection and survival and was therefore considered to be affected by the attachment relationship (Stayton, Hogan, & Ainsworth, 1971).

Attachment theorist assigned paramount importance to a child’s early life experiences and viewed them as the foundation for all of the child’s future relationships. This was thought to occur through the development of an internal working model, which represents both cognitive and emotional features of the early relationship (Bowlby, 1980). It is this internal working model that is also presumed to facilitate the acquisition of values (Bretherton, Golby, & Cho, 1997).

**Mutual reciprocity perspective.** Maccoby and Martin (1983) offered a different explanation for the connection between caregivers’ responsiveness and children’s compliance from attachment theorists. They suggested that parental compliance with their children’s reasonable needs, requests, and bids for attention elicits an innate tendency to reciprocate the actions of others. As such, children would comply with parental requests without conflict or resistance. These interactions lead to parents and children having shared
goals. Several studies have provided support for this notion of reciprocal compliance, including those involving situations that did not involve surveillance of the child by the parent (Kochanska, 1997).

It is evident from this review that the body of research on children’s socialization and acquisition of values is extensive. However, these many approaches have been fragmented. They focus on different aspects of the parent-child relationship and thus describe different sets of principles that govern that aspect of the interaction. Therefore, for the most part, their lines of research seem to proceed rather independently of each other (Grusec & Davidov, 2010). In addition, several theories conflict in their prediction about children’s learning of behaviour and response to parental interventions. For example, in the case of a caregiver responding to a crying child, learning theorists would predict an increase in future crying, whereas attachment theorists would predict a decrease.

Lastly, the vast majority of theories and research in the area of value socialization has focused on parental responses to children’s misbehaviour, which underestimates the complexity of parenting. Whereas children’s misdeeds offer parents frequent and convenient opportunities to teach values, they may not be the only or even the best circumstance in which children acquire standards from their parents. Therefore, there seems to be a need for a more comprehensive approach to children’s socialization.

**Domains of Socialization Approach**

A more recent approach is one that integrates the seemingly disparate parenting theories and lines of research into a comprehensive approach termed the domains of socialization approach. The basic assumption of this approach is the inherent complexity of
the socialization process, which is characterized by several types or domains of caregiver-child interactions. Each domain of interaction involves different rules for effective parenting. As such, there is no single principle of effective parenting or general mechanism of development but rather different rules that apply to their relevant domains (Grusec & Davidov, 2010).

The notion of domains describing different aspects of complex processes has been identified in the area of cognitive psychology, where information processing has been found to occur in specialized modules (e.g., face recognition) (Duchaine, Cosmides, & Tooby, 2001). Each domain of processing is governed by a specialized mechanism with no unitary principles of functioning. This notion of domain specificity has also been used to describe social interactions. Fiske (1992) postulated the existence of four basic types of social interactions between individuals. The first is communal sharing, which involves individuals treating each other as equal members, who share their resources. In an authority ranking interaction, individuals interact in a hierarchical system. Equality matching describes interactions where people exchange benefits and monitor relationships for imbalances. Lastly, in relationships described as market pricing, individuals interact based on standards defined by a market system.

Interactions more specific to children and their socialization agents were discussed in the context of domains by Bugental and her colleagues (Bugental & Goodnow, 1998; Bugental, 2000; Bugental & Grusec, 2006). Particularly, four primary types of relationships were identified between agents and objects of socialization. The first is attachment relationships in the context of stress, when the caregiver maintains proximity and ensures the child’s safety. The second domain describes social identity relationships, in which members
of an in-group share a common identity and adopt similar norms and routines. Hierarchical relationships refer to interactions where caregivers use their greater control of resources in order to gain compliance. Lastly, reciprocal relationships involve those where children and their caregivers engage in mutual and reciprocal exchanges in an equal-status environment. Based on extensive reviews of research findings, Bugental and her colleagues identified the different evolutionary bases, developmental course, neurohormonal regulatory mechanisms, principles of social interaction, and goals of socialization of the different domains.

The domains of socialization approach offered by Grusec and Davidov (2010) is a refinement and elaboration of the typology proposed by Bugental and her colleagues. According to this model, child-caregiver interactions occur in five domains, which are control, protection, guided learning, group participation and mutual reciprocity. Children learn many different lessons and values and there is good reason to believe that they are socialized in a different manner in different domains. It is also possible that some domains possess features that either facilitate or hinder the process of value learning and internalization. Thus, one of the goals of this study is to examine the usefulness of the domains of socialization approach for the conceptualization and study of value acquisition within the family.

The following section will outline the features of each domain, as they were described by Grusec and Davidov (2010), and then discuss factors pertaining specifically to value acquisition and internalization.

**Control domain.** Interactions in the control domain involve situations where the caregiver uses external consequences (either positive or negative) in order to control the
child’s behaviour. This can occur in situations when the caregiver and the child’s goals are in conflict, that is, the caregiver wants one thing and the child wants another. These situations arise when the child is misbehaving or noncompliant. Alternatively, external control of behaviour can occur in response to the child’s positive behaviour. In the control domain, the parent is in the role of a disciplinarian who attempts to either reduce undesirable or increase desirable behaviours to ensure safety as well as adherence to social norms. Parents achieve this goal by utilizing the resources available to them as authority figures, such as the ability to punish, reward, withdraw privileges, and use their knowledge and experience for appropriate reasoning. In general terms, appropriate parental response in the control domain involves applying sufficient pressure to achieve the desired behaviour without undue threat to the child’s sense of autonomy. Induction may also be used. Similarly, when rewarding positive behaviour, the reward should not be so great that the child would attribute his or her behaviour solely to the external stimulus.

**Factors impacting value learning.** As noted, the control domain has been the focus of much investigation in the area of value learning and internalization. The overall conclusion of this body of research is that value learning is maximized in the context of misbehaviour when parents use gentle discipline in combination with reasoning (Hoffman, 1970a; Maccoby, 2007). However, there are several characteristics of the discipline setting that can undermine the process of value acquisition. First, children are likely to experience negative emotions in these frequently emotionally charged situations. Even if the caregiver employs less threatening techniques and uses reasoning, the child would presumably continue to associate these interactions with the misdeed and therefore experience negative emotions. Negative emotionality has been shown to interfere with information processing necessary for successful learning (Thompson, 1990). Specifically, negative emotions, such as
anger and fear, signal threat and lead to narrowing of thought processes. As a result, children’s cognitive resources are occupied with the regulation of negative emotions, leaving them less able to focus on the parental message. At the same time, parents are often more concerned with managing the child’s negative emotions than the teaching of the value (Laible & Panfile, 2009). Despite recent evidence for the effectiveness of minimal power assertion combined with induction (Laible & Panfile, 2009), there is reason to believe that reasoning removed from the negatively arousing situation of conflict and misdeed may be more effective in facilitating value learning and internalization. Thus, in the present study, it was expected that internalization of values learned in the context of the control domain would also be low.

In terms of how frequently the control domain would be mentioned in narratives, studies indicate that typically developing children are noncompliant at least 20 to 30 percent of the time and are therefore frequently operating in this domain (Bergin & Bergin, 1999; Forman & McMahon, 1981). Further support for the higher frequency of interactions in the control domain compared to other domains comes from a study in which child-caregiver interactions were observed both in the laboratory as well as the home setting; more than half the children failed to comply with prohibition requests (Polak & Harris, 1999; Power, McGrath, Hughes, & Manire, 1994). Therefore, it is clear that children provide parents with ample opportunities to operate in the control domain, with parents attempting to gain compliance and modify their children’s behaviour. Therefore, in the present study it was expected that narratives describing interactions in the control domain between children and their care-givers would be significantly more frequent than in all other domains.

Lastly, it was expected that the use of positive and negative consequences would be easier for parents of younger children, as the parents would presumably have more control
over resources at younger ages. In addition, monitoring of behaviour as well as behavioural control becomes more challenging with older children as they increasingly operate independently from their caregivers.

**Protection domain.** The protection domain involves situations where the child is experiencing distress, whether potential or real. The caregiver is in the role of the protector or provider of comfort. Interactions in this domain are the focus of attachment theory (Ainsworth, Blehar, Waters, & Wall, 1978), according to which appropriate parental response involves sensitive and timely response to the child’s needs. When parents respond to their children’s cues of distress in such a manner, children develop a sense of security and feel confident to venture away from the caregiver for exploration, assured that the caregiver will be available should the need arise (secure attachment). Dismissive or overbearing responses lead to less desirable child outcomes.

**Factors impacting value learning.** Securely attached children have a better ability to self-regulate their negative emotions (Cassidy, 1994), a process mediated in part by the development of neurobiological systems following early-life interactions with caregivers (Gunnar, 2000). This ability to self-regulate distress enables children to better respond empathically to the distress of others, as their own negative arousal is modulated and does not interfere with the ability to focus on others’ needs. This higher empathic ability also allows children to better understand the impact of their own negative actions on others, thus facilitating value learning.

Children whose distress is consistently and sensitively alleviated by their caregivers learn to trust that the caregivers have their best interest at heart and, therefore, these children are more likely to accept the caregiver lessons (Thompson, 1998). However, this trust may cause children to take in parental messages without much personal evaluation and cognitive
processing, which could reduce the extent to which these messages are internalized (Kroger, 2003). In addition, similar to the control domain, when children are operating in the protection domain, they are by definition experiencing negative emotions, which can interfere with cognitive processes required for successful learning (Thompson, 1990). Therefore, it was predicted that value-learning described in the context of the protection domain would not result in high levels of internalization. However, internalization levels would be expected to be higher in this context compared to situations involving misbehaviour and discipline (control domain) because it is likely that children’s negative emotions in the context of the protection domain would be reduced by parental comforting and would have therefore a less detrimental effect on learning.

**Group participation domain.** The group participation domain takes advantage of children’s natural desire to emulate others and the ability to learn through observation, an ability which was first described by Bandura and his colleagues (Bandura & McDonald, 1963). In this domain, the parent is in the role of the manager of the child’s environment, thereby ensuring that the child is exposed to desirable models of behaviour. This domain involves situations where a child observes modeling of behaviour as well as engages in routines and rituals, such as doing house chores or celebrating cultural holidays.

**Factors impacting value learning.** Bandura and Walters (1963) identified observational learning as the primary mode of value acquisition, although Hoffman (1970), on the basis of a review of the literature, suggested that it was less effective in the development of self-control. Although observation and participation in routines are powerful means of socialization, they produce value acquisition that is largely devoid of personal examination and cognitive processing. Therefore, if these values come to be questioned, they
are easily susceptible to change (Bourdieu, 1977). Accordingly, it was expected that narratives depicting value-learning within the group participation domain would be associated with lower levels of value internalization. However, since children are not expected to experience high levels of negative emotions within this domain, internalization was expected to be higher than in the control domain (involving misbehaviour and discipline).

**Guided learning domain.** In the guided learning domain, the caregiver is in the role of a teacher, who supports the child’s acquisition of new information and skills required for optimal functioning. These interactions can occur in the context of casual conversations between caregivers and children or with the use of story-telling or reading books. These interactions occur in the absence of misdeed, conflict, or distress. In this domain, effective parenting involves teaching in the child’s zone of proximal development (Vygotsky, 1978). This type of teaching requires that the material or skills taught are just above the student’s current level of ability or understanding but not so complex that they cannot be successfully mastered with the aid of a teacher. The best method for teaching in the zone of proximal development is by scaffolding or adjusting the level of support to the child’s changing skill level, with the eventual goal of withdrawing support altogether when the skill is mastered (Wood, Bruner, & Ross, 1976). During this process, the student becomes aware of the metacognitive processes, like strategies, required for mastering of the taught skill and gradually adopts them (Puntambekar & Hübscher, 2005).

**Factors impacting value learning.** While most studies on supported learning have been conducted in the area of cognitive development, the acquisition of values can be understood within that context as well. Discussions between children and caregivers provide excellent opportunities for the teaching of values. Parents are able to provide guidance and
supported teaching, which expose the child to the metacognitive processes used to arrive at the lesson. This results in a deep understanding of issues and, as a result, the values learned are less susceptible to change. There is indeed evidence that such conversations are predictive of moral growth. For example, parents who used a representational style during discussions, where they re-present the child’s reasoning by requesting further information, paraphrasing, and checking for comprehension, had children with better ability to reason about moral issues (Walker & Taylor, 1991; Walker, Hennig, & Krettenauer, 2000).

In addition, in the guided learning domain there are fewer opportunities for interference of negative emotions characteristic of the control and protection domains. In fact, the types of interactions typical of this domain, such as casual conversation and storytelling, may actually elicit positive emotions in the child. In sharp contrast to the detrimental effects of negative emotions on information processing, positive emotions have been shown to facilitate more creative, flexible and integrative thinking (Ashby, Isen, & Turken, 1999). In addition, cognitive resources are not occupied with emotion regulation and are, therefore, fully available for processing and learning information. If caregivers employ teaching techniques that are interfering or controlling, thus threatening the child’s autonomy (Grolnick, 2003), it may lead to some level of negative emotion. However, this is presumed to occur less frequently and the negative emotions to be less intense than the negative emotionality that is inherent in the control and protection domains. Thus, the guided learning domain seems ideal for the type of deep cognitive processing required to achieve internalization of values. As such, it was expected that values said to have been learned in this setting would be associated with a high level of internalization.

**Mutual reciprocity domain.** The mutual reciprocity domain is different from other domains described by this model in that it involves interactions where the parent and the
child are equal partners in an exchange. This domain involves situations where the parent and child accommodate each other’s wishes and work together to achieve a common goal. Interactions in this domain often involve exchange of positive emotions, for examples, during interactive play (Kochanska, 2002). Appropriate parenting in the mutual reciprocity domain involves accommodating children’s reasonable requests and bids for attention.

**Factors impacting value learning.** As previously mentioned, there is evidence that children are more likely to comply with parental requests if the parent previously complied with their requests (Kochanska, 1997). This committed compliance has been shown to longitudinally predict children’s prosocial behavior and regard for rules (Kochanska, Aksan, & Koenig, 1995; Kochanska, Koenig, Barry, Kim, & Yoon, 2010). More importantly, Kochanska et al. found evidence to suggest that children attributed these behaviours to internal motivation, presumably because the interactions that led to their learning did not involve obvious external pressure from the parent. Therefore, committed compliance was thought to contribute to value internalization. However, this process is assumed to occur outside the learner’s awareness; thus, individuals would not readily view interactions in this domain as a source of lesson learning. Alternatively, the route between interactions in the mutual reciprocity domain and value learning may be indirect. Specifically, positive exchanges between parents and children may lay the foundation of a positive relationship, in the context of which children are more likely to accept parental messages during interactions involving value teaching. Therefore, it was predicted that, in the current study, few or no narratives would involve value-learning within the mutual reciprocity domain.

**Content of values within socialization domains.** For successful functioning in society, children must learn lessons and values of varied content. While internalization is often discussed within the context of moral values, internalization as defined by Self
Determination Theory is applicable to any content of values that were originally external and were later taken over by the self. For example, values that were investigated within the Self Determination Theory include schoolwork, (Ryan & Connell, 1989), performing chores around the house (Grolnick & Ryan, 1989), and attending religious functions (Ryan, Rigby, & King, 1993). Turiel and his colleagues have distinguished among different kinds of values. First, they identify transgressions that cause physical or psychological harm to others (e.g., hitting or lying) (Sigel, 1984; Turiel & Damon, 1998). These behaviors are generally considered immutable. Prudential lessons involve protection of one’s own physical and psychological wellbeing (e.g., health habits or coping with stress). Values involving personal issues are those that do not directly affect others and do not pose danger to the self (e.g., personal style of dress). The fourth area of social knowledge or values as defined by Turiel and his colleagues is social conventions, which refer to arbitrary rules that define behaviours necessary for smooth social interaction. Other types of values are around prosocial conduct (helping or caring for others), lessons about work ethic (e.g., working hard, completing chores, and doing well in school) and those relating to social interactions (e.g., dating and social activities).

Evidence indicates that children reason differently about these various issues. Specifically, children consider intervention of an authority figure more acceptable in situations involving moral and social conventional issues rather than those in the personal or prudential areas (Smetana, 1997). Moreover, different types of parental interventions are considered appropriate by children depending on the content of the issue at hand. For example, reasoning referring to harm to others is viewed as more appropriate in the context of moral transgressions whereas reasoning about collective well-being is seen as more acceptable in the context of social convention misdeeds. Considering this, it is reasonable to
infer that lessons of different content need to be socialized differently and may lend themselves better to one domain of socialization over another.

Grusec, Dix, and Mills (1982) found that mothers were more likely to discipline children for antisocial acts rather than failure to act prosocially. Moreover, since issues of harm to others are considered to be immutable, it is reasonable that they would be more readily accepted in a disciplinary context. There is evidence that participation in group routines and rituals is predictive of prosocial behaviour (Grusec, Goodnow, & Cohen, 1996; Hart, Atkins, & Ford, 1999). The protection domain involves situations of distress. Thus, prudential issues about personal safety and wellbeing seem to be naturally related to the types of issues that arise in this domain. Lastly, interactions in the guided learning domain are unique due to their representational and abstract nature - any content can be taught through conversations. Therefore, this domain was not expected to be associated with any specific lesson content. In the present study, participants were asked to describe any important value or lesson and responses were analysed for recurrent themes.

**Source of lesson and socialization domains.** The question of whether different caregivers rely on different socialization domains when teaching their children values was also examined in the present study. There appears to be inconsistent evidence about differential reliance on interactions in particular domains by mothers and fathers. Some studies indicate that mothers rely more heavily on disciplinary action compared to fathers, a finding explained by the fact that, as primary caregivers, mothers spend considerably more time with their children (Biernat & Wortman, 1991; Lytton & Zwirner, 1975; Nobes, Smith, Upton, & Heverin, 1999; Power et al., 1994; Xu, Tung, & Dunaway, 2000). Other studies, on
the other hand, do not confirm this differential finding (Wissow, 2001). Therefore, no particular predictions were made regarding the source of value-learning.

**Cultural variation in socialization domains.** Domains of socialization are considered to be universal because they evolved in response to relatively similar challenges through the era of evolutionary adaptiveness (Bugental, 2000; Grusec & Davidov, 2010). However, some cultural differences are expected in the frequency with which parents and children operate in different domains and what would be considered effective and acceptable parenting within each domain. One such difference documented in the literature is the differential use of story-telling. Particularly, parents of East-Asian origins are more likely to use personal story-telling to convey moral and social standards, whereas their Western counterparts use story-telling as a medium of entertainment (Miller, Wiley, Fung, & Liang, 1997). This difference may be due to the high value placed on didactic narrative within the Confucian tradition.

In addition, while interactions within the control domain have been described to be primarily characterized by negative emotions, there may be variability with regard to how this applies to interactions between parents and children in non-Western cultures. Studies demonstrate, for example, that Chinese parents tend to employ authoritarian and power assertive discipline methods more frequently than their Western counterparts (e.g., Steinberg, Dornbusch, & Brown, 1992). Some findings indicate that, unlike their Western counterparts, this style of parenting does not seem to be associated with the same level of negative outcomes in Chinese children.

However, more recent studies point to the importance of distinguishing between harsh forms of authoritarian parenting and directive techniques. The concept of *Guan*, which
means “to govern”, is central to proper parenting in the Chinese cultural context (Chao, 1994; Tobin, Wu, & Davidson, 1989). It has positive connotations, as it also means “to care for” and “to love”, and refers to high parental involvement, monitoring, guidance, and teaching as necessary components of positive upbringing. When harsh forms of authoritarian parenting are distinguished from these directive techniques, similar patterns of negative child outcomes are obtained in Chinese samples as in their Western counterparts (Chen, Wang, Chen, & Liu, 2002; Sorkhabi, 2005). Nevertheless, stricter and more directive discipline methods do not seem to be as frequently associated with rejection in the Chinese culture the way that they often are in the Western culture. As a result, children may perceive these directive parenting strategies less negatively, which would result in less negative emotion.

Research about parenting practices in other cultural groups is less abundant. One study suggests that South-Asian immigrant parents in Canada rely significantly less on harsh parenting techniques compared to their European-Canadian counterparts (Ho, Bluestein, & Jenkins, 2008). Another study explored parenting practices of South-Asian immigrants in England using a qualitative approach (Paiva, 2008). Findings indicated that instruction was reported as the most prominent parenting method. In addition, while praise of positive behaviour was reported to be used, it was considered damaging to the child’s attitudes particularly relating to the individual’s place within the social hierarchy.

These differences in parenting practices highlight the importance of cross-cultural comparisons in research studies. Participants from four different ethnic background groups were included. These were East-Asian, South-Asian, Middle-Eastern and Western-European (see Appendix A for ethnic background inclusion criteria). Based on the literature reviewed above, in the current study it was expected that participants of East-Asian background would
report interactions involving value-learning within the guided learning domain more frequently than their Western counterparts. In addition, participants of East-Asian background were expected to report less negative emotions associated with interactions in the control domain compared to their Western counterparts.

**Present Study**

A previous study by Vinik, Johnston, Grusec, and Farrell (2013) examined the process of value acquisition in various settings and demonstrated the utility of the domains of socialization approach. The purpose of the present study was to expand on this work by focusing on processes within the family. A modified version of the McAdams’s narrative approach was used in the present study. Emerging adults produced autobiographical narratives about a specific event where they successfully learned a value from their caregivers. In addition to the presence of meaningful processing and coherence, narratives were also coded for specific content categories, which would allow the examination of domain-specific concepts. These included the event that precipitated the lesson learning and thus indicated the socialization domain in which the participant was operating, the content of the learned value and the source of the learned value. The sample included participants from four ethnic background groups (one individualistic and three collectivist) to enable examination of cultural influences on the process of value learning within the framework of socialization domains.

**Research Questions and Summary of Hypotheses**

1. Is the domains of socialization approach effective in organizing the process of value acquisition within the family? It was hypothesized that participants would produce narratives describing events in all domains but mutual reciprocity.
2. Which socialization domain is mentioned most frequently in situations of value learning? It was hypothesized that the control domain would be the most frequently mentioned within the overall sample.

3. Does the frequency of socialization domains reported within narratives differ as a function of ethnic background? It was hypothesized that participants from an East-Asian ethnic background would produce more narratives in the guided learning domain compared to their Western counterparts. No specific predictions were made for the South-Asian and Middle-Eastern groups due to the scarcity of relevant studies.

4. Do individuals report learning values in different socialization domains as a factor of their age at the time of the recalled event? It was hypothesized that participants would report learning values within the context of the control domain at younger ages compared to all other domains.

5. Do individuals report learning different value content in specific domains? It was hypothesized that there would be evidence for domain specificity in terms of the content of lessons learned within each domain as follows:
   a. The control domain would be associated most frequently with lesson of inhibition of antisocial behaviour.
   b. The protection domain would be associated most frequently with lessons of prudential issues.
   c. The group participation domain would be associated most frequently with prosocial lessons.
   d. The guided learning domain would not be associated with a specific lesson content.
6. Do socialization domains differ in the levels of value internalization? It was hypothesized that the control domain would be associated with the lowest level, protection and group participation with moderate levels, and the guided learning domain with the highest level of value internalization.

7. Are there reported differences in emotional valence amongst the socialization domains? It was hypothesized that, in the overall sample, narratives describing events in the control and protection domains would be associated with more negative valence than those in the guided learning and group participation domains.

8. Does the valence associated with socialization domains differ as a function of ethnic background? Participants of East-Asian ethnic background were predicted to report less negative valence associated with the control domain than their Western counterparts.

9. What is the effect of emotional valence on information processing quality in the context of value learning? It was hypothesized that the presence of positive and absence of negative valence would be associated with confidence in the accuracy of events being described.

**Method**

**Participants**

Participants were 326 first-year Canadian university students who were recruited through a psychology undergraduate course and received course credit for their participation. The inclusion criteria required participants to be 21 years of age or younger, from one of East-Asian, South-Asian, Middle-Eastern or Western-European ethnic backgrounds (see...
Appendix A for a full list of countries), and not of mixed ethnic background. Three participants did not produce a narrative (East-Asian female, Middle-Eastern male and Western-European male). Sixteen participants provided narratives that were not detailed enough to code for the required categories. Of these 7 were East-Asian (3 males), 2 South-Asian (1 male), 4 Middle-Eastern (1 male) and 3 Western-European (2 males). Thirteen participants produced narratives that did not involve a care-giver but rather a friend, romantic partner or teacher. Of these, 4 were East-Asian (2 males), 3 were South-Asian (1 male), 4 were Middle-Eastern (3 males) and 2 were Western-European (1 male). Therefore, the final sample used for analysis included 294 participants (45.6% male).

Participants’ age ranged from 17 to 21 years ($M = 18.6, SD = 0.97$). There was a comparable number of participants in each of the 4 ethnic background groups, with 30% East-Asian (45 males, 43 females), 25% South-Asian (34 males, 40 females), 23% Middle-Eastern (28 males, 42 females) and 22% Western-European (27 males, 37 females) individuals. The majority of the Western-European group were Canadian-born (84.4%). From the other three ethnic background groups, 30% were born in Canada (28.4% of East-Asian, 28.8% of South-Asian, and 33.3% of Middle-Eastern participants). The rest had immigrated on average 7.47 years previously ($SD = 5.31$; range = 0 to 19) at an average age of 11 years ($SD = 5.63$; range = 1 to 21), with English as their second language. The sex breakdown of individuals who immigrated was as follows: 55.6% of the East-Asian group, 51.9% of the South-Asian Group, and 60.9% of the Middle-Eastern group were females.

Participants’ acculturation level was measured by the Vancouver Acculturation Measure (Ryder, Alden, & Paulhus, 2000). This measure is based on a bi-dimensional model of acculturation, which views mainstream and heritage cultural identities as relatively independent of each other. As such, individuals may adopt some values and behaviours of
the mainstream culture and at the same time be committed to their heritage culture. Therefore, in order to fully understand a person’s acculturation level, both dimensions should be assessed. The Vancouver Acculturation Measure is a self-report scale that includes 20 items, with which participants indicate their agreement on a 9-point scale. The measure yields two sub-scores. The heritage subscale includes items such as “I often participate in my heritage cultural traditions” and “I believe in values of my heritage culture”. The mainstream subscale includes items such as “I often participate in mainstream North American cultural traditions” and “I believe in mainstream North American values”. The complete measure is included in Appendix B. Cronbach’s alphas for the subscales were .89 and .85 respectively. Both subscales were normally distributed, with kurtosis of 0.47 and -0.16 (SE = 0.28). In the present study, participants of Western-European background reported themselves to be significantly more acculturated to the mainstream North American culture than all other ethnic background groups ($F(3, 290) = 12.32, p < .001$). There were no significant differences amongst ethnic background groups on the heritage subscale.

Overall, participants were largely from educated families, with post-secondary education completed by both parents in 56.1% of the overall sample (55.7% in the East-Asian, 45.2% in the South-Asian, 56.5% in the Middle-Eastern and 68.8% in the Western-European group). Post-secondary education was completed by one parent in 23.5% of the overall sample (20.4% in the East-Asian, 34.2% in the South-Asian, 21.7% in the Middle-Eastern and 17.2% in the Western-European group). Only children comprised 15.9% of the sample. Of those who had siblings, 46.5% were the oldest, 17.0% were the middle and 36.4% were the youngest. The mean number of children in the family was 2.4. With respect to religion, 34.7% of the participants identified themselves as not religious, 26.9% as
Christian, 22.1% as Muslim, 8.1% as Hindu, 5.7% as Buddhist, and 2.4% as belonging to another religion.

**Measures**

This study was part of a larger study, which included several additional measures and questionnaires. Only the relevant measures for the present study are described.

**Narrative.** Participants were presented with the following written prompt:

“Please think of important values you have that help to guide the way you live your life (for example: helping people in need, being honest, not hurting people's feelings, being responsible for your actions, working hard). Try to think about how you acquired these values and life lessons from the person(s) who were primarily responsible for raising you (e.g., parents, grandparents, aunts/uncles, siblings). Think back to a time in your life that involved you learning an important value from the person(s) who raised you. In this situation, the person(s) who raised you was successful in teaching you this value, that is, you really took it in and applied it to the way you lead your life. Please pause and take a few moments to remember the circumstances and details of the event (where you were, who you were with, what happened, what you were thinking and feeling). This event can be from any period in your life, but it should be at least one year old.”

**Coding of narratives.** Narratives were coded for the categories of **domain in which child was operating**, **source of lesson**, **lesson content**, **presence of meaningful processing**, and **coherence**. The narrative was followed by a series of follow-up questions designed to elicit and clarify details about the described event, which were required for the coding of domain, source and content (See Appendix C for the relevant questions). In the coding of these last three categories, information from both the narrative and the follow-up questions was used. However, greater emphasis was placed on the narrative response, especially in situations where responses to the follow-up questions contradicted the information provided
in the narrative. As such, additional information from the follow-up questions was used for coding only if it made sense within the context of the narrative and added relevant information. The coding process was data-driven, whereby subcategories of the predetermined coding variables were identified and created based on recurrent themes that emerged from the narratives. Presence of meaningful processing and coherence was coded only on the basis of the narrative response.

All five narrative variables described above were coded by two coders. Both coders underwent extensive training to become familiar with the coding categories. The first 55 narratives were used for the purpose of training. The remainder of the sample was coded independently and used for calculation of inter-coder reliability. After the completion of independent coding of the entire sample, the coders discussed and resolved disagreements in their coding to determine the final category assignments, which were used for data analysis. Narratives ranged in length from 16 to 470 words.

**Domain in which child was operating.** In order to determine the domain in which the child was operating during the event described in the narratives, the precipitating event was assessed. Precipitating event refers to the event which initiated or prompted the learning of the value. The relevant follow-up question was “What prompted this event?” Participants were instructed to choose all the options that applied from a list (see Appendix C) as well as indicate the order in which the events occurred. During the coding process, information from the narrative as well as the follow-up question was used to determine the precipitating event. Ten precipitating events emerged from the narratives, which were subsequently grouped into four domains of socialization, control, protection, guided learning and group participation. There were no instances of precipitating events in the mutual reciprocity domain. The precipitating events that formed each domain are described in detail below.
The control domain included events of (1) child’s own misbehaviour, either alone or together with others (the action could be considered negative from the perspective of the child or that of the relevant authority figure), (2) positive behaviour that was reinforced and (3) caregiver forcing the child to do something s/he did not want. The following are examples of narratives from each of these subcategories respectively.

Child misbehaved

“I was in grade 8 or 9 back then. I used to get regular homework in school. I was supposed to hand it back in next day. Due to some reason I was unable to attend school. So my father went to my friend's house and brought me his material to study and finish the homework. I lied to my parents that I finished it. My parents discovered I was lying when they checked my notebooks and saw the blank pages. I was spanked, given a harsh lecture and denied one time food.” Female, 19-years-old, South-Asian, 13 years at the time of the event described.

Child did something positive

“I won a swimming competition when I thought I would totally lose it. My father was so happy of this and so proud of me. (he was there and actually helped me get out of the water and while doing that he was extremely happy and proud of me and kept saying "you did it"). I learned to believe in myself and my abilities.” Male, 21-years-old, Middle-Eastern, 12 years at the time of the event described.

Parent made child do something

“One day my friends came over to play (action figures, monopoly, Pokemon, etc.), after a while my mom came in and told us that we should balance our play time with gaining knowledge, so she made us all read for the same amount of time we had already played, which was like 2 hours. My friends thought she was crazy and so did I, but eventually I realized that she was right, as I apply it to my life today, I still go out and have a good time, but I make sure I balance it with my studies. It is amusing
how the books she gave to my friends were simple kids books she had bought for me when I was younger, but the books she gave me to read were those of politics and law, I had no idea what I was reading....lol” Male, 20-years-old, South-Asian, 9 years at the time of the event described.

The protection domain included (1) the child experiencing distress, (2) a sibling or someone else inflicting physical or psychological harm on the child and (3) a traumatic event happening to a close person (e.g., serious illness or death). The following are examples of narratives from each of these subcategories respectively.

Child in distress

“One day after school, I came home upset because I did not do well on one of my tests. I was very discouraged and frustrated with myself. My mother came into my room and had a little talk with me. She told me that she understands my situation but the best way to deal with it is to move on. She explained that it is okay that I cry it out but essentially, I should take the experience as a life lesson and move on from it.” Female, 18-years-old, East-Asian, 14 years at the time of the event described.

Child harmed by someone

“There was a time when a supposedly a childhood friend and other friends of mine started rumors about me. I had no idea why but they were saying some nasty things. At that time, I didn't confront them about it but I went to talk about it with my mother. These nasty rumors also involved my mother in them. I asked her if one of the rumors about my mother were true and she told me they were not true. These rumors about myself not only made me mad but it got me really angry since it involved my mother. I had physical fights with this childhood friend of mine when younger. My mother had told me to calm down, and be responsible, I wasn't a little kid anymore where I could do whatever I wanted and get suspended. And that now, I'm in high school and be more responsible and more mature about situations like this. She told me how this always happens to her. She then advised me
how she goes on about these situations and to find out where these rumors were coming from and confront each and every person that is spreading it.” Female, 18-years-old, South-Asian, 16 years at the time of the event described.

Traumatic event to a close person

“My father got kidnapped in Karachi during a business trip when we were in Dubai. My mother took me and my sister together and comforted us. My mom saw how sad I was and, in retrospect, realized how detrimental it’d be for me to know that my father could be gone forever; so she took a bold decision in telling me never to invest myself emotionally into anything that can be taken away from me, so that when it does, it won't hurt as much.” Male, 18-years-old, South-Asian, 10 years at the time of the event described.

The guided learning domain included one category, which described events of non-disciplinary conversations between the child and care-giver that occurred in the absence of the child’s own misdeed or distress. Conversations were either child- or parent-initiated. They included advice seeking, discussion of specific future events (e.g., going for a sleep-over at a friend’s house) or discussion of past events (e.g., something the child learned in school). Discussions could be regarding the positive or negative behaviour of someone else (but not the participant), world events (e.g., earth quake) or discussions that arose casually and spontaneously. The following are examples of narratives from this category.

Child-initiated conversation, advice seeking

“I was deciding what to choose as my courses after i graduated from high school for University. My father sat me down and explained that these four years in university were crucial for my success as an individual later on in life. He told me how those that do not work hard in these four years and often drop out or do not work as hard as they should have often regret it in their future because they do not
have jobs that are successful or professional.” Female, 18-years-old, Middle-Eastern, 17 years at the time of the event described.

Parent-initiated conversation regarding someone’s negative behaviour

“My parents taught me not to be naive or overly trusting of people. This is one of the few times that they told me an negative experience that they had in the past in order to teach me a lesson. My parents had two really good friends. These friends were married to each other and lived in the same neighbourhood. They had fallen on hard times and asked my parents for some money. My parents were more than willing to help their friends, so they lent them a significant amount of money. Unfortunately, my parents were overly trusting and didn't protect themselves in this arrangement. There was no record of the borrowed money and there was no legally binding document that would force these people to pay them back. My parents just assumed that the honour code would be upheld, and their friends would pay them back. Unfortunately, these people didn't pay my parents back and they disappeared. My parents stressed that while it was a good thing to help friends, it is always important to protect yourself and never give 100% trust to someone, because unfortunately people only look after themselves.” Male, 21-years-old, South-Asian, 11 years at the time of the event described.

Child-initiated conversation regarding someone’s negative behaviour

“I was in the car with my family, when I told them one of my classmates started smoking. I will never forget what my father said in response. Basically he said that he wishes he could give kids a looking glass that would see into the future. He talked about how kids and teenagers often feel "invincible" and that life ends after high school. My mom and him told me a bunch of personal stories of FRIENDS they had that died from drinking and driving, or had a kid and had to leave school, etc. My parents are the fairytale that met when they were in high school, dated, married, and continue to be each others best friends. So when they continued to tell me how if kids could only realize that life will go on for another 50 years past high school, they may grasp that their life is fragile and
insignificant in comparison as to what's ahead. From that conversation on, I truly have tried to live like I have many more years to come. I never smoked or got a car with a drunk driver once. I've also found someone who I've dated for 2 years and had a "crush" on each other since we were 12. This event may not hold as much meaning to others, but my family and I are really close and I really look up to my parents. Them telling me if only I had a looking glass and could see myself in 35 years, really motivated me to ensure I WOULD be in a situation I wouldn't regret.” Female, 18-years-old, Western-European, 14 years at the time of the event described.

The group participation domain included events of (1) the child observing modeling of positive behaviour without a discussion, (2) the child observing modeling of negative behaviour without a discussion and (3) the caregiver encouraging the child to do something, with no resistance on the child’s part. The following are examples of narratives from each of these subcategories respectively.

Observation of positive modeling

“One night, my father and I were in the car, driving back home from an event. On the way, we saw this lady whose car was stuck in the middle of the road, and she was struggling to remove something from underneath her car. We could have just driven past her car, as there was enough space to do so. Instead, my father stopped our car and went towards the lady's car to help her remove the basket stuck under her car. Within a few minutes, the basket was removed and the lady was able to drive easily.” Female, 19-years-old, South-Asian, 10 years at the time of the event described.

Observation of negative modeling

“One of my aunts lacks self-control, and can drink a bit too much at family events. One time she significantly embarrassed herself; based on this I gained a greater appreciation for the importance of moderation (not just in how much I drink, but in all things - I decided that excess in general was bad).” Male, 18-years-old, Western-European, 14 years at the time of the event described.
Parent encouraging child to do something

“My parents always encouraged charity for the poor and needy. At a fund-raising event, my Dad told me to get involved in charitable events. Because of the encouragement from my parents, I was able to collect a lot of funds and also hold a charity bake sale. This is an event that I have proud memories about since my friends got involved too, and together we raised a lot of money. Also, I spread awareness about the poverty in Africa to my relatives since they did not really know how bad the conditions were. After this event, I received personal recognition from MSF (medecin sans frontier) and was given a certificate. My parents were proud of me, and helped me throughout the event. Their support allowed me to work harder and continue the project for longer. I felt extremely happy for being able to help out kids in Africa who were poverty stricken.” Female, 18-years-old, South-Asian, 16 years at the time of the event described.

Cohen’s kappas for the precipitating event subcategories ranged from .66 to 1.00. Nine of the 10 subcategories had Cohen’s kappas of .82 and above. The subcategory with the kappa value of .66 was that of observing someone modeling negative behaviour and included only 4 instances.

Lesson source. Lesson source refers to the individual who contributed most to the learning of the value. The relevant follow-up question for this coding variable was “Who taught you the value?” Participants were instructed to choose from a provided list all the individuals who played a role in teaching the value and then rank them according to how much each individual contributed to the learning. Therefore, if more than one person was mentioned in the narrative, this item was used to determine the individual who contributed most to the learning of the value in the specific situation described in the narrative. The follow-up question included mother, father, grandfather, grandmother, authority member of the extended family (e.g., uncle) and sibling. Cohen’s kappas ranged from .95 to 1.00.
**Lesson content.** Lesson content refers to the value the child learned during the event described in the narrative. The relevant follow-up question was open-ended in format, “What value have you actually learned?” and was coded, in combination with the information provided in the narrative. Ten subcategories were identified. (1) Inhibition of antisocial behaviour involves lessons regarding refraining from actions that cause physical or psychological harm to others. Examples include learning not to lie, steal or say hurtful things to others. Antisocial thoughts and emotions, such as hate, were also coded in this subcategory. (2) Prosocial lessons involve learning to act for the benefit of others, even if it involves a personal cost. Examples include volunteering, donating funds and helping a friend in need. Prosocial thoughts and emotions, such as empathy, were also coded in this subcategory. (3) Lessons of work ethic are those that promote conscientiousness and sustaining of effort in order to achieve a goal. Since participants in this sample were first-year undergraduate students, the theme of working hard in order to gain admission to University was clearly salient. Therefore, lessons of work ethic were often mixed with the concept of education importance. Examples of the work ethic lesson content include working hard in school to achieve good grades and putting in one’s best effort to learn a skill. (4) Prudential lessons pertain to one’s psychological or physical safety. Examples include maintaining a healthy diet, safe sex, importance of managing personal stress, and being cautious in trusting others. (5) Lessons of social interactions pertain to friendships and romantic relationships. Examples include restrictions around dating and importance of true friendship. (6) Lessons about compliance and obedience are those that require the child to submit to and respect authority figures. Examples of this lesson content include respecting elders and doing what you are told by your parents. (7) Lessons of appreciation encourage a child to value and appreciation what s/he has more, for example, valuing the opportunity to
have access to education or gratitude for food and other comforts. (8) Importance of family lessons focuses specifically on teaching the child to place greater importance on the family unit over other considerations. (9) Lessons pertaining to social conventions involve the transmission of arbitrary rules that regulate social interactions. Examples include table manners and being polite. (10) Lastly, lessons that did not belong to one of these categories were coded in the other category and included importance of religion, learning to be independent, and lessons pertaining to managing one’s money. Cohen’s kappas ranged from .79 to 1.00.

**Meaningful Processing.** The presence or absence of meaningful processing by the writer within the narrative was coded. Responses to follow-up questions were not used for the coding of this category, as the intent was to assess unprompted and self-generated statements. The coding of this category was dichotomous, with a score indicative of either presence or absence of meaningful processing by the self assigned to each narrative. The presence of meaningful processing variable was used as a measure of internalization level of the value described in the narrative as it signaled personal engagement with and evaluation of the issues. Cohen’s kappa was .81. The following are sample narratives that demonstrate this category.

Meaningful processing by the self present in narrative

“In elementary school I was in deep trouble for lying to the teacher. When the principal and teacher told my father, he was very disappointed. In order to set me straight, my father lectured me and punished me. I still remember the lecture he gave as he had a very negative tone. I then learned to be as honest as I can be, because trust is key in developing relationships with people. This event has
stuck with me for all my life and I try my best to be honest to my peers.” Female, 18-years-old, South-Asian, 9 years at the time of the event described.

Meaningful processing by the self absent from narrative

“At one of our family dinners with all my cousins and aunt on my mothers side of the family. My grandfather always takes the opportunity to teach us something about his life our something we should always remember and at this family diner he told this story. -- Our church was been wanting to build at community center for a long time but has always been coming up short with money and political and legal support to get the project off the ground, My grandfather (Jido) has been the leading for in trying to rally support and build the center, At a fundraising event for the community center he donated $10,000 dollars towards the cause. My mother and her sister where rather upset and worried because he had donated so much money and he replied "If I take care of God's house He'll take care and mine". My grandfather owns a rather successful pita bread company and no short of a lie two days later he walked into work and on his desk was an order for pita bread valued at $10,00.”

Female, 19-years-old, Middle-Eastern, 17 years at the time of the event described.

*Narrative coherence.* Coding of narrative coherence was based in part on Baerger and McAdams’ (1999) definition. However, because participants in the present study were instructed to produce a narrative describing one specific event in time, the four dimensions of narrative coherence (orientation, structure, affect and integration) were not fully applicable. However, the general principles of coherence were drawn from this model. Coherence was assessed on a 4-point scale. Low coherence scores were assigned to narratives that were difficult to comprehend or included minimal detail related to the narrative prompt. Narratives were considered moderately coherent if they included sufficient level of detail to understand the event described. Narratives with high coherence scores were those that provided
elaborated explanation of the event and included discussion of internal states (thoughts and feelings). Narratives with very high coherence included highly elaborate explanations, including the events leading to the situation, as well as discussion of internal states. Proficiency in English writing was not considered in coding, thus participants were not penalized for their writing style, grammar, spelling or other language-related errors. Interrater reliability was good (intra-class correlation of .71).

**Narrative-related variables that did not require coding**

*Reason for successful learning.* Internalization of the learned values described in the narrative was assessed in two ways. The first method was through the coded narrative category of meaningful processing. The second method of assessing internalization of the learned value was by examining the reason for successful learning of the value described in the narrative. Following the narrative, participants answered the question: “Why were they successful at teaching you the value?” by selecting all the options that applied from a list and then ranking them in the order of importance. Reasons were: (1) it made me think about the event, (2) I agreed with the lesson, (3) I felt bad for another person(s), (4) I felt guilty, (5) I trusted the person who was teaching me the lesson because they are knowledgeable and experienced, (6) I trusted the person who was teaching me the lesson because I know they have my best interest in mind, and (7) I was afraid of being punished. The reason that was selected to be most important in contributing to successful learning of the value was used for analysis. No coding was required for this item.

The reason involving the emotional reaction of other-oriented distress (sympathy, reason number 3) was selected by only 8 participants (2.8% of the sample). Therefore, it was excluded from further analyses. The remaining 6 reasons were combined into 4 subcategories as follows. (1) Cognitive processing included child thinking about the event and agreeing
with the lesson. This category was considered to be indicative of high level of internalization, as it demonstrated evidence of deeper processing by the participant. (2) Fear of consequences included experiencing emotions of self-oriented distress (guilt) and fear of punishment. This category was considered to be indicative of low internalization level, as it indicates extrinsic and introjected motivation. (3) Trust in caregiver’s knowledge and experience and (4) trust that the caregiver has the child’s best interest in mind were analyzed separately and were considered to be indicative of moderate internalization because the massage was accepted without deeper and more meaningful processing (identification).

**Emotional valence of event.** Emotional valence of the event described in the narrative was determined based on the participants’ response to two follow-up questions. Participants were asked to rate “How negative is this memory for you?” and “How positive is this memory for you?” on a scale of 1 (not at all) to 7 (very). The two items were highly and significantly correlated \( r = -0.69 \). Therefore, they were combined into a single variable, which indicated presence of positive and absence of negative valence of the event described in the narrative. The valence variable was negatively skewed (skewness of -0.72), with the majority of the sample reporting low levels of negative and high levels of positive valence. This variable was therefore converted to a categorical dichotomous variable using a median split. The predominant presence of positive and absence of negative valence is consistent with the fact that participants were asked to recall events of successful value-learning.

**Confidence in accuracy of memory reported.** This variable was used as a marker for information processing quality; that is, how well individuals encoded the events that were described in their narratives. Participants indicated their confidence in accuracy of memory reported by rating the question “How confident are you that the event really unfolded as you have described?” on a scale of 1 (not at all confident) to 7 (very confident). The variable was
negatively skewed (skewness of -0.90), with the majority of the sample reporting high levels of self-reported accuracy. This variable was therefore converted to a categorical dichotomous variable using a median split.

**Procedure**

Participants signed up for study timeslots on an online system, which provided general information about the study topic and stipulated the inclusion criteria. The study took place in a research lab. Upon arrival at the lab, participants were greeted by a research assistant and asked to confirm that they met the study’s inclusion criteria. Then the research assistant provided detailed information about what the study entailed. Upon signing the consent form, participants were given the option of completing the questionnaire on a computer or in a paper-and-pencil format. Only one participant chose the latter. Participants began by providing demographic information. Then participants produced the narrative response, followed by specific questions about the event they described in their narrative. Lastly, the Vancouver Acculturation Measure and Self Concordance scales were completed. Upon completion of the study, participants were fully debriefed regarding the study’s purpose and provided with a debriefing letter for their records. (See Appendix D for a copy of the consent form, Appendix E for a copy of the debriefing form, and Appendix F for research assistant’s instructions.)

**Results**

**Overview of Analyses**

Hierarchical log-linear analyses were used to explore 2- and 3-way interactions among nominal variables. Backward elimination procedures by simple deletion of effects were used to determine the most parsimonious model (i.e., cell frequencies accounted for by
the minimum number of terms). This procedure begins with the maximum number of terms (all one-way, two-way and three-way interactions) and eliminates each term at a time until a final model is determined (Tabachnick, 2007). The sample size of the current study allowed only for 3 variables to be included in each analysis. Significant 2-way interactions were then interpreted using chi-square tests of independence. One-sample chi-square tests were used to analyze significant main effects. Relations between nominal and continuous variables were analysed using one-way analyses of variance (ANOVA) or one-way multivariate analysis of variance (MANOVA), as appropriate.

Results are presented in order of the hypotheses. First, an analysis of domain frequencies was conducted for the entire sample followed by investigation of moderation effects by demographic variables. The remainder of the analyses were conducted in a parallel fashion. Socialization domains, additional variable of interest (e.g., lesson source or lesson content), and participants’ ethnic backgrounds were analyzed followed by domains, variable of interest, and participant’s sex.

**Preliminary Analyses**

Preliminary analyses were conducted to examine the simple relations between main study variables. Results of the chi-square tests of independence are presented in Table 1.
Table 1. Chi-square Analyses of Simple Relations between Study Variables

<table>
<thead>
<tr>
<th>Socialization domain (SD)</th>
<th>LS</th>
<th>LC</th>
<th>MP</th>
<th>RL</th>
<th>EV</th>
<th>CIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson source** (LS)</td>
<td>-</td>
<td>1.66</td>
<td>0.81</td>
<td>3.48</td>
<td>4.48*</td>
<td>0.10</td>
</tr>
<tr>
<td>Lesson content (LC)</td>
<td>-</td>
<td>6.12</td>
<td>-</td>
<td>52.87*</td>
<td>21.35*</td>
<td>0.03</td>
</tr>
<tr>
<td>Meaningful Processing (MP)</td>
<td>-</td>
<td>12.51*</td>
<td>2.62</td>
<td>-</td>
<td>6.17</td>
<td></td>
</tr>
<tr>
<td>Reason for Learning (RL)</td>
<td>-</td>
<td>20.85*</td>
<td>-</td>
<td>12.03*</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Emotional valence (EV)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Confidence in accuracy (CIA)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Note: Pearson $\chi^2$ is significant at the $p < .05$ level.
**Mothers and fathers only

Distribution of Socialization Domains in Narratives

To examine the hypothesis regarding the applicability of the domains of socialization approach to the study of value socialization (hypothesis 1), the distribution of domains within narratives was examined. Findings indicated that there were narratives that described interactions in all domains with the exception of mutual reciprocity (see Table 1), which was in line with predictions. The main effect of domain was examined using a one-sample chi-square test. Results of the overall test revealed a significant difference in frequencies ($\chi^2 (3) = 87.31, p < .001$). Follow-up pair-wise comparisons indicated that the Control Domain was mentioned in narratives significantly more frequently than all other domains ($\chi^2 (1, N = 203) = 32.32, p < .001$). The Protection, Guided Learning and Group Participation domains did not differ significantly from each other ($\chi^2 (2, N = 152) = 3.17, p = .21$). Frequencies and
percentages of domains are presented in Table 2. These findings are in line with hypothesis 2, indicating that the control domain was the most frequently mentioned in narratives. Interestingly, the vast majority of narratives within the control domain described situations of wrong-doing, with only 11 narratives referring to positive behaviour that was rewarded or praised.

Table 2. Frequencies and Percentages of Socialization Domains Described in Narratives

<table>
<thead>
<tr>
<th>Domain of Precipitating Event</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>142</td>
<td>48.3</td>
</tr>
<tr>
<td>Child’s misbehaviour</td>
<td>126</td>
<td>88.7</td>
</tr>
<tr>
<td>Child’s positive behaviour</td>
<td>11</td>
<td>7.7</td>
</tr>
<tr>
<td>Parents made child do something</td>
<td>5</td>
<td>3.5</td>
</tr>
<tr>
<td>Guided Learning</td>
<td>61</td>
<td>20.7</td>
</tr>
<tr>
<td>(casual conversations)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Participation</td>
<td>46</td>
<td>15.6</td>
</tr>
<tr>
<td>Observing positive modeling</td>
<td>39</td>
<td>84.8</td>
</tr>
<tr>
<td>Observing negative modeling</td>
<td>4</td>
<td>8.7</td>
</tr>
<tr>
<td>Parent encouraging child to do</td>
<td>3</td>
<td>6.5</td>
</tr>
<tr>
<td>Protection</td>
<td>45</td>
<td>15.3</td>
</tr>
<tr>
<td>Child experiencing distress</td>
<td>31</td>
<td>68.9</td>
</tr>
<tr>
<td>Harm inflicted by another</td>
<td>12</td>
<td>26.7</td>
</tr>
<tr>
<td>Traumatic event to a close person</td>
<td>2</td>
<td>4.4</td>
</tr>
</tbody>
</table>

Note: Differing superscripts denote statistically significant differences at the $p < .05$ level.
Socialization Domains in Narratives and Demographic Variables

To examine whether the frequency distribution of domains in narratives was moderated by interactions with categorical demographic variables (ethnic background, sex, and religion) a series of hierarchical log-linear analyses was conducted. First, the relation between domains, ethnic background, and sex were explored. Backward elimination by simple deletion of effects produced a model with the likelihood ratio of $\chi^2 (28) = 25.98$, $p = .57$, indicating a good fit generated by the model. The final model included a main effect of domain (partial $\chi^2 (3) = 77.01$, $p < .001$) and no significant 2- or 3-way interactions with ethnic background and/or sex. Thus, hypothesis 3 was not supported by the results, as no moderation effect of ethnic background on domains was found (See Figure 1).

![Figure 1. Frequency distribution of socialization domains in four ethnic background groups.](image)
A similar procedure was repeated for domains, participants’ religion, and gender. This model’s likelihood ratio was $\chi^2 (25) = 28.52, p = .28$, once again, indicating a good fit. The final model included a main effect of domain (partial $\chi^2 (3) = 76.04, p < .001$) and a main effect of religion (partial $\chi^2 (3) = 27.14, p < .001$). No significant 2- or 3-way interactions were found, indicating that the frequency distribution of domains did not differ according to religion or gender. The main effect of religion indicates that there was a significant difference in the frequency of religions which participants reported they followed. The sample size of the current study did not allow the exploration of a 3-way interaction between domains, religion, and ethnic background. However, 2-way interactions between these variables have already been ruled out.

A one-way multivariate analysis of variance (MANOVA) was conducted to evaluate the relation between domains and participants’ acculturation level. The two subscales of the questionnaire (heritage and mainstream) were used as dependent variables. No significant differences in acculturation level on either subscale were found in relation to the domains generated in narratives (Wilks’s $\Lambda = .98, F(6, 580) = 0.84, p = .54$).

**Socialization Domains and Age of Child at the Time of Value-Learning**

Participants’ age at the time of the event described in the narrative ranged from 2 to 18 years ($M = 11.7, SD = 4.35$). In hypothesis 4, it was predicted that the control domain would be associated with a significantly younger age at the time of the described value-learning event. A three-way ($4 \times 4 \times 2$) analysis of variance (ANOVA) was conducted to investigate whether the age at which values were learned differed as a function of domain, child’s sex, and ethnic background. Two significant effects emerged, a main effect of domain and a 3-way domain by ethnic background by sex interaction. The significant 3-way interaction ($F(9, 260) = 2.03, p < .05$), was further probed by examining the effect of domain
and ethnicity on age at the time of the event for males and females separately. To control for Type I error across the two separate analyses, the alpha was set at .025. There was no significant domain by ethnicity interaction for males ($F(9, 118) = 1.27, p = .26$), but there was for females ($F(9, 142) = 2.41, p < .05$).

Follow-up tests were conducted to evaluate the four pairwise comparisons for females, with the alpha set at .006 (.025 / 4 = .006) to control for Type I error. For East-Asian participants, narratives in the control domain were associated with significantly younger ages at the time of the event than in the guided learning domain. No significant differences were found for the other three ethnic background groups. Thus, partial support was found for hypothesis 4, but only for females of East-Asian ethnic background. Table 3 presents means and standard deviation of mean age at the time of the event for males and females for the four ethnic background groups.
Table 3. Mean Age at Time of Event Described in Narrative

<table>
<thead>
<tr>
<th>Sex</th>
<th>Ethnic Background</th>
<th>Control</th>
<th>Protection</th>
<th>Guided Learning</th>
<th>Group Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>East-Asian</td>
<td>8.21&lt;sup&gt;a&lt;/sup&gt;</td>
<td>13.22&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>14.57&lt;sup&gt;b&lt;/sup&gt;</td>
<td>12.67&lt;sup&gt;ab&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>South-Asian</td>
<td>9.96</td>
<td>16.40</td>
<td>14.20</td>
<td>11.00</td>
</tr>
<tr>
<td></td>
<td>Middle-Eastern</td>
<td>13.16</td>
<td>12.00</td>
<td>10.10</td>
<td>13.71</td>
</tr>
<tr>
<td></td>
<td>Western-European</td>
<td>11.28</td>
<td>12.20</td>
<td>12.14</td>
<td>11.86</td>
</tr>
<tr>
<td>Males</td>
<td>East-Asian</td>
<td>10.20</td>
<td>11.67</td>
<td>13.10</td>
<td>10.50</td>
</tr>
<tr>
<td></td>
<td>South-Asian</td>
<td>10.38</td>
<td>12.71</td>
<td>10.78</td>
<td>14.80</td>
</tr>
<tr>
<td></td>
<td>Middle-Eastern</td>
<td>11.13</td>
<td>16.20</td>
<td>11.57</td>
<td>13.75</td>
</tr>
<tr>
<td></td>
<td>Western-European</td>
<td>10.44</td>
<td>16.50</td>
<td>14.50</td>
<td>10.33</td>
</tr>
</tbody>
</table>

Note: Differing superscripts denote statistically significant differences at the <i>p</i> < .05 level

Socialization Domain and Lesson Source in Narratives

Frequencies and percentages of lesson source are presented in Table 4. An overall one-sample chi-square test revealed a significant difference in frequencies (χ² (6, <i>N</i> = 296) = 413.32, <i>p</i> < .001). Follow-up tests were conducted and showed that mothers were mentioned as the lesson source significantly more frequently than all other sources. Fathers were the second most frequent source, significantly differing from all renaming sources, followed by both parents teaching the lesson together. Siblings, grandparents, and other authority members of the extended family (e.g., aunts and uncles) did not significantly differ from each other and were mentioned significantly less frequently than the first three sources.
Only mothers and father were included in the remaining analyses of source. A hierarchical log-linear analysis was conducted to examine the relation between domains, lesson source (mothers, fathers), and participants’ ethnic background. The model’s likelihood ratio was \( \chi^2 (27) = 27.53, p = .44 \), indicating a good fit. The final model included two main effects, that of domain and source, and no significant interactions. Both main effects have been described above.

Table 4. Frequencies and Percentages of Lesson Source

<table>
<thead>
<tr>
<th>Lesson Source</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>145(^a)</td>
<td>49.3</td>
</tr>
<tr>
<td>Father</td>
<td>86(^b)</td>
<td>29.3</td>
</tr>
<tr>
<td>Both parents</td>
<td>31(^c)</td>
<td>10.5</td>
</tr>
<tr>
<td>Grandmother</td>
<td>9(^d)</td>
<td>3.1</td>
</tr>
<tr>
<td>Sibling</td>
<td>8(^d)</td>
<td>2.7</td>
</tr>
<tr>
<td>Member of extended family-authority</td>
<td>8(^d)</td>
<td>2.7</td>
</tr>
<tr>
<td>Grandfather</td>
<td>7(^d)</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Note: Differing superscripts denote statistically significant differences at the \( p < .05 \) level.

Next, a hierarchical log-linear analysis was performed with domains, lesson source (mothers, fathers), and participants’ sex which yielded a significant 3-way interaction (\( \chi^2 (3) = 8.57, p < .05 \)). Standardized residuals with absolute value of 2 and higher were examined to interpret the interaction. Mothers were significantly more likely to be mentioned as the
lesson source than fathers in the control domain, but only by female participants. Fathers, on the other hand, were significantly more likely to be mentioned as the lesson source than mothers in the guided learning domain, but only by male participants. Lastly, this procedure was repeated with domains, lesson source, and ethnic background in the analysis, with no significant interactions or main effects.

Socialization Domains and Lesson Content in Narratives

Frequencies and percentages of lesson content are presented in Table 5. The categories social interactions, importance of family, appreciation, compliance/obedience, social conventions, and other occurred in fewer than 5% of the sample and were thus excluded from further analyses. Thus, four types of lesson content were analyzed, namely, inhibition of antisocial behaviour, initiation of prosocial behaviour, work-ethic, and prudential lessons.

To investigate the hypothesis of domain specificity, with specific lesson content associated with particular domains, a hierarchical log-linear analysis with domains, lesson content, and participants’ gender was conducted. The resulting model had a good fit, indicated by the likelihood ratio $\chi^2 (16) = 17.18, p = .37$. The final model included only a 2-way interaction between domains and lesson content, which was further explored with a chi-square test of independence. The analysis revealed a significant relation between the domain in which the child was operating and the content of the value learned (Pearson $\chi^2 (9, N = 236) = 124.08, p < .001$). Phi of .73 indicated a strong effect size. Follow-up one sample chi-square comparisons of the proportion of lesson content within each domain indicated that lessons involving inhibition of antisocial behaviour were significantly more likely than any other lesson content to be mentioned in the control domain ($\chi^2 (3) = 69.52, p < .001$). Lessons of prudential values were more likely than any other content to be mentioned in the
protection domain ($\chi^2 (3) = 69.15, p < .001$). Prosocial values were significantly more likely than any other content to be mentioned in the group participation domain ($\chi^2 (3) = 66.89, p < .001$). In the guided learning domain, lessons regarding prosocial behaviour ($\chi^2 (2) = 12.33, p < .01$) and work ethic ($\chi^2 (3) = 15.71, p < .001$) were mentioned significantly more frequently than those of inhibition of antisocial behaviour. In this domain, no single lesson content was mentioned significantly more frequently than all others. This finding provides support for hypothesis 5, indicating domain specificity regarding content of values learned. The pattern of specificity was also consistent with predictions. (See Figure 2).

Although not included in the final model, the main effect of lesson content was significant, indicating frequency differences. An overall one-sample chi-square test confirmed this difference in frequencies. Follow-up tests indicated that the three most frequently mentioned lessons, inhibition of antisocial behaviour, work ethic and prudential issues, did not significantly differ from each other ($\chi^2 (2, N = 193) = 3.80, p = .15$). The next most frequently mentioned lesson category was initiation of prosocial behaviour, which differed significantly from inhibition of antisocial behaviour ($\chi^2 (3, N = 237) = 9.36, p < .05$) but not from work ethic and prudential lessons ($\chi^2 (2, N = 161) = 3.37, p = .19$).
Table 5. Frequencies and Percentages of Lesson Content

<table>
<thead>
<tr>
<th>Lesson Content</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhibition of antisocial behaviour</td>
<td>76&lt;sup&gt;a&lt;/sup&gt;</td>
<td>25.9</td>
</tr>
<tr>
<td>Work ethic</td>
<td>63&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>21.4</td>
</tr>
<tr>
<td>Prudential</td>
<td>53&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>18.0</td>
</tr>
<tr>
<td>Initiation of prosocial behaviour</td>
<td>44&lt;sup&gt;b&lt;/sup&gt;</td>
<td>15.0</td>
</tr>
<tr>
<td>Social interactions</td>
<td>13</td>
<td>4.4</td>
</tr>
<tr>
<td>Importance of family</td>
<td>13</td>
<td>4.4</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>4.1</td>
</tr>
<tr>
<td>Appreciation</td>
<td>8</td>
<td>2.7</td>
</tr>
<tr>
<td>Compliance/obedience</td>
<td>6</td>
<td>2.0</td>
</tr>
<tr>
<td>Social conventions</td>
<td>6</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Note: Differing superscripts denote statistically significant differences at the $p < .05$ level.
Note: Differing superscripts denote statistically significant differences at the $p < .05$ level.

Figure 2. Proportions of Content of Lessons within each Domain.

The sample size was not sufficiently large to conduct a log-linear analysis with domains, lesson content, and ethnic background in the same analysis, as the required sample size would have to be at least 320 ($4 \times 4 \times 4 \times 5 = 320$). Therefore, the relation between lesson content and ethnic background was explored using a chi-square test of independence. A significant 2-way interaction emerged (Pearson $\chi^2 (9, N = 236) = 16.67, p < .05$). Phi of .27 indicated a moderate effect size. Follow-up one sample chi-square comparisons of the proportion of lesson content within each ethnic background were conducted and revealed that participants from a Middle-Eastern background were significantly less likely to mention lessons involving inhibition of antisocial behaviour values in their narratives compared to participants of all other ethnic backgrounds ($\chi^2 (3) = 13.19, p < .05$) (See Figure 3).
Domains in Narratives and Value Internalization

Internalization of the value discussed in the narratives was assessed in two ways, meaningful processing and reason for successful learning. Just under half the narratives (44.2%) were found to include evidence of meaningful processing by the self. Frequencies and percentages of the reasons for learning the lesson are presented in Table 6. The two value internalization measures were significantly related (Pearson $\chi^2 (3, N = 286) = 12.51, p < .01$). A follow-up one sample chi-square test of proportions indicated that participants who produced a narrative with evidence of meaningful processing were significantly less likely to
indicate fear of consequences as the reason for successful learning of the value ($\chi^2 (3) = 12.52, p < .05$).

To investigate hypothesis 6 regarding differential value internalization among domains, a hierarchical log-linear analysis with domains, presence of meaningful processing and participants’ ethnic background was conducted. The analysis produced a model with a good fit ($\chi^2 (24) = 24.44, p = .44$) and included only a significant 2-way interaction between domain and meaningful processing (partial $\chi^2 (3) = 10.40, p < .05$). This interaction was probed with a chi-square of independence test and revealed that narratives in the group participation domain were significantly more likely to have meaningful processing present than those in the control and guided learning domains ($\chi^2 (3) = 10.00, p < .05$). There was also a trend for narratives in the group participation domain to contain more meaningful processing than narratives in the protection domain ($\chi^2 (1) = 3.25, p = .07$). The results of this analysis did not support hypothesis 6, according to which the control domain would be associated with the lowest and guided learning domain with the highest level of value internalization. Lastly, no significant interactions were found with participants’ sex.

Parallel analyses were conducted for the second measure of internalization, reason for successful value learning. The sample size was not sufficient to explore the relation between domain, reason for successful learning and ethnic background in a log-linear analysis. A hierarchical log-linear analysis with domain, participants’ sex and reason for successful learning (cognitive processing, fear of consequences, trust in caregiver’s knowledge and experience, and trust that caregiver has the child’s best interest in mind) was conducted. The analysis yielded a model with a good fit ($\chi^2 (16) = 10.63, p = .83$). The final model included only a 2-way significant interaction between domains and reason for successful learning (partial $\chi^2 (9) = 65.26, p < .001$), which was further explored using a chi-square test of
independence. The test was significant (Pearson $\chi^2 (9, N = 286) = 57.94, p < .001$). Phi of .45 indicates moderate effect size. Follow-up one sample chi-square comparisons of the proportion of domains within each reason were conducted to examine the pattern of specificity. Fear of consequences, which was considered indicative of low internalization levels, was significantly more likely to be given as the reason for successful learning of lessons in the control than any other domains ($\chi^2 (3) = 74.13, p < .001$). This was consistent with predictions. Trust that the caregiver has the child’s best interest in mind (indicative of moderate levels of internalization) was cited significantly more frequently in the protection domain than all other domains ($\chi^2 (3) = 12.38, p < .001$), as predicted. Cognitive processing was mentioned in the group participation domain significantly more than in the control domain ($\chi^2 (3) = 9.49, p < .05$) but no significant differences were found for the other domains. This reason was indicative of the highest internalization level and was hypothesized to be most common in the guided learning domain. This prediction therefore was not supported by findings. Lastly, there were no significant differences in the proportion of trust in the caregiver’s knowledge and experience amongst domains ($\chi^2 (3) = 6.95, p = .07$). However, there was a trend with the protection and guided learning domains mentioned more frequently than the control and group participation domains. (See Figure 4)
Table 6. Frequencies and Percentages of Reasons for Successful Learning

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cognitive processing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinking about the event</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>Agreeing with the lesson</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td><strong>Trust in caregiver’s knowledge and experience</strong></td>
<td>56</td>
<td></td>
</tr>
<tr>
<td><strong>Negative emotionality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotion of self-oriented distress</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Fear of punishment</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td><strong>Trust that caregiver has child’s best interest in mind</strong></td>
<td>40</td>
<td></td>
</tr>
<tr>
<td><em>Emotional reaction of other-oriented distress</em></td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

Note: Differing superscripts denote statistically significant differences at the \( p < .05 \) level.
Note: Differing superscripts denote statistically significant differences at the $p < .05$ level

Figure 4. Proportions of Domains within each Reason for Successful Learning.

**Domains in Narratives and Emotional Valence of Recalled Event**

Sixty five percent of participants reported that the event they described in the narrative was associated with high levels of positive and low levels of negative emotions. To investigate whether socialization domains differ in emotional valence and whether there is cultural variation (hypotheses 7 and 8), a hierarchical log-linear analysis was performed and yielded a model with a good fit ($\chi^2 (24) = 24.59, p = .43$). The final model included one significant 2-way interaction, between domain and emotional valence (partial $\chi^2 (3) = 25.37, p < .001$). A chi-square test of independence was used to probe this significant interaction (Pearson $\chi^2 (3, N = 292) = 23.67, p < .001$). Phi of .29 indicated a moderate effect size. A
follow-up one-sample chi-square comparison of proportions indicated that narratives in the guided learning and group participation domains were significantly more likely to be associated with presence of positive and absence of negative emotions compared to the control and protection domains ($\chi^2 (3) = 24.29, p < .001$), which is consistent with the predicted pattern. However, contrary to hypothesis 8, no cultural variation was found.

To explore interactions with participants’ sex, another hierarchical log-linear analysis was performed with socialization domain, emotional valence, and participants’ sex. The analysis yielded a model with a good fit ($\chi^2 (8) = 4.29, p = .83$). The final model included the significant 2-way interaction between domains and emotional valence, which was already explored. No significant interactions with participants’ sex were found.

**Emotional Valence and Confidence in Accuracy of Memory Reported**

The vast majority of participants reported a high level of confidence in accuracy of memory reported in their narratives (84%). To explore the relation between emotional valence and confidence in accuracy of the recalled event (hypothesis 9), a hierarchical log-linear analysis with ethnic background included was performed and yielded a model with a good fit ($\chi^2 (12) = 9.89, p = .63$). The final model included a significant 2-way interaction between emotional valence and confidence in accuracy of memory reported (partial $\chi^2 (1) = 11.42, p < .01$). A chi-square test of independence was used to probe the significant interaction between emotional valence and confidence in accuracy of memory reported (Pearson $\chi^2 (1, N = 292) = 12.03, p < .01$). Phi of .20 indicated a moderate effect size. A follow-up one-sample chi-square comparison of proportions indicated that presence of positive and absence of negative emotionality was associated with higher narrative accuracy ($\chi^2 (1) = 5.93, p < .05$). This result was consistent with predictions. Hierarchical log-linear
analyses were conducted to rule out the effect of participants’ sex on this interaction and no significant effects were found.

Interestingly, no significant interaction was found between socialization domain and confidence in accuracy of memory. Thus, none of the four socialization domains was associated with more confidence in accuracy of narratives compared to others.

**Socialization Domains and Narrative Coherence**

Narrative coherence scores were normally distributed (kurtosis of -0.04) and ranged from 1 to 4 ($M = 2.99$, $SD = 0.77$). A three-way ($4 \times 4 \times 3$) ANOVA was conducted to examine whether narrative coherence differed according to domains, ethnic background, or participants’ sex. No significant main effects or interactions were found.

**Summary of Results**

It was hypothesised that the domains of socialization approach would be useful in organizing the investigation of value acquisition within the family. The results of this study confirmed this hypothesis, as participants produced narratives with content relating to four of the five domains, as predicted. Findings were also consistent with the hypothesized frequency distribution of domains, with the control domain most frequently reported in the context of value-learning in the overall sample. However, hypothesized cultural variations (specifically in the East-Asian ethnic background group) were not found. Moderations by other demographic variables (sex, religion, and acculturation level) were also ruled out, with one exception. Females of East-Asian ethnic background reported narratives in the control domain at a significantly younger age than all other ethnic background groups.

Mothers were mentioned as the source of lesson learning significantly more frequently than fathers. In the overall sample, no interaction between socialization domain and lesson source was found. However, mothers were mentioned as the lesson source more
frequently in the control domain by females, while father were mentioned as the source in the
guided learning domain by males.

The hypothesized domain specificity regarding content of learned lessons was also
supported, with lessons of inhibition of antisocial behaviour reported most commonly in the
control domain (involving misbehaviour), prudential lesson in the protection domain
(involving child feeling distressed), and prosocial values in the group participation domain
(involving modeling of behaviour and managing of the child’s environment). The guided
learning domain was not related to one specific content. Evidence of cultural variation was
found in the types of lessons reported in narratives, with participants of Middle-Eastern
ethnic background reporting lessons of inhibition of antisocial behaviour significantly less
frequently compared to participants of the other three ethnic background group included in
this study.

The hypothesis regarding socialization domains and value internalization were only
partially confirmed. While the control domain was related to lower levels of internalization
assessed by one of the measures used (reason for successful value learning), this was not
found with the second value internalization measure (meaningful processing within
narrative). In addition, contrary to expectations, the group participation domain was found to
be associated with the highest level of value internalization.

The guided learning and group participation domains were associated with
significantly more positive and less negative emotional valence compared to the control and
protection domains. In turn, presence of positive and absence of negative emotional valence
was significantly related to better confidence in accuracy of memory reported in narratives.
Lastly, narrative coherence did not differ amongst the socialization domains.
Discussion

The purpose of the present study was to evaluate the usefulness and applicability of the domains of socialization approach (Grusec & Davidov, 2010) to the study of value acquisition from caregivers. A modified personal narrative methodology was used to explore the various aspects of the value acquisition process. The present study expanded on previous work, which demonstrated the utility of the domains of socialization approach for investigating value acquisition across various contexts (Vinik et al., 2013). Findings of the previous study indicated that participants recalled events involving value learning within all domains, with the exception of mutual reciprocity. Lessons resulting from misbehaviour (control domain) were most frequently reported, while lessons resulting from direct teaching (guided learning domain) were most highly internalized. The self (i.e., self-reflection and self-generation) was reported to be the most frequent source of value learning. Lastly, these effects were not moderated by interactions with demographic variables (ethnic background and sex).

In the present study, autobiographical narratives of emerging adults about a time they learned an important value from a caregiver were analysed. Findings pointed to the merit of the domains of socialization approach for understanding how emerging adults recall learning important values and life lessons. Narratives and follow-up questions were analyzed for specific variables of interest, namely the event that precipitated the value learning (the marker for the domain in which the child was operating), lesson source, and lesson content. The open-ended nature of the narrative response allowed for data-driven exploration of concepts that emerged from the participants’ memories of value-learning. In addition, participants reported on the emotional valence of the memory as well as their confidence in
the accuracy of the reported events (used as a marker for quality of information processing during the lesson learning).

Of particular interest was how well values that were discussed in the narratives were internalized and whether levels of internalization differed amongst the socialization domains. Internalization was defined within the framework of Self Determination Theory as the process through which individuals accept parental values as inherently correct and integrate them into their larger value system and identity (Grolnick et al., 1997). This process requires deep personal evaluation of the issues. The presence of meaningful processing within the narrative can be indicative of this personal cognitive engagement and was used as a measure of value internalization. The reason for successful learning of the value was also used as a marker of internalization, as it sheds light on the individual’s motivation for taking in the value (external, introjected, identified, or integrated) (Grolnick et al., 1997). Lastly, cultural variations in these processes were examined, with particular predictions for the East-Asian group.

The hypothesised applicability of the domains of socialization approach to the understanding and investigation of the value acquisition process within the family was supported, as the events recalled in narratives could be successfully categorized into four of the five domains. The control domain was found to be most frequently reported. Support was also found for domain specificity with regard to the content of values learned within each socialization domain. Regarding value internalization within socialization domains, predictions were only partially supported. Specifically, consistent with hypotheses, narratives in the control domain were found to be associated with self-reported extrinsic motivation for learning the value, indicative of low levels of internalization. However, narratives in the
control domain were not associated with lack of meaningful processing, which was contrary to prediction. In addition, the group participation, and not the guided learning domain as predicted, was associated with meaningful processing within narratives. Participants who reported learning values in the group participation domain within their narratives were also more likely to provide intrinsic reasons for successfully learning the lessons.

Hypotheses were also supported regarding the emotional valence associated with socialization domains, with the guided learning and group participation domains reported to be more positive and less negative compared to the control and protection domains. In addition, consistent with prediction, presence of positive and lack of negative valence was significantly related to better confidence in accuracy of memory reported in narratives, indicative of quality of information processing and learning. Lastly, hypothesized cultural variations were not found nor moderations by other demographic variables. One exception was the finding that females of East-Asian ethnic background reported narratives in the control domain at significantly younger age compared to males and females of all other ethnic background groups. The theoretical and practical implications of these findings are discussed below.

Socialization Domains within Narratives

Grusec and Davidov (2010) outlined five socialization domains, which involve controlling children’s behaviour by external means (control domain), protecting children from harm and relieving their distress (protection domain), teaching children information or skills outside of the discipline or distress setting (guided-learning domain), managing children’s environment to increase desirable role models (group participation domain), and mutually accommodating each other’s wishes (mutual reciprocity domain). In the present
study, participants produced narratives that could be categorized into all domains with the exception of mutual reciprocity. This finding suggests that values can be successfully socialized in the context of these four domains, as reported by the learner. Therefore, the predominant focus in the literature on value learning within the discipline setting may be misguided.

Interactions in the control domain were mentioned significantly more frequently as the context of value learning compared to the other socialization domains. This finding could be a result of the frequency of interactions between children and caregivers in the disciplinary context (Polak & Harris, 1999; Power et al., 1994). Alternatively, interactions in the control domain may simply be more salient and thus more likely to be recalled than interactions in other domains. In addition, participants may be influenced by their own perceptions regarding how lessons are learned. For example, learning lessons from one’s misdeed may seem to be commonly accepted as most effective, as evidenced by the numerous children’s stories about misdeeds and consequences (e.g., Aesop’s famous fable about The Boy Who Cried Wolf).

Interestingly, very few narratives in the control domain depicted situations of positive behaviour that was rewarded. Rather, the vast majority of narratives described misbehaviour and wrong-doing. The effectiveness of praise and reward is a contentious topic. Research findings suggest that a variety of variables can determine the effect of rewards on motivation for future behaviour (Deci, 1975; Henderlong & Lepper, 2002). The findings of the current study suggest that being rewarded for positive behaviour does not seem to be a salient context of value acquisition and thus was not recalled frequently. Lastly, in the present study none of the narratives depicting wrong-doing described failure to initiate prosocial
behaviour. This appears to be consistent with previous evidence suggesting that caregivers may be reluctant to discipline children for failure to act prosocially (Grusec, Dix and Mills, 1982).

With respect to the mutual reciprocity domain, which was not described in narratives, there is evidence that children’s compliance is higher if parents previously had complied with their requests (Kochanska, 1997). This committed compliance has been shown not only to predict children’s prosocial behavior and compliance but also has been related to intrinsic motivation for these behaviours (Kochanska et al., 1995; Kochanska et al., 2010). This type of motivation is developed because the interactions that led to their learning presumably did not involve obvious external pressure. Therefore, it is reasonable to conclude that interactions in the mutual reciprocity domain would lead to value internalization. However, in both the present and the previous study, participants did not spontaneously recall any interactions within the context of mutual reciprocity that resulted in value learning. This is not to say that values cannot be learned within this context but rather that individuals were not able to readily access memories about value learning as a result of these interactions. There may be several reasons for this result.

First, the subtle pattern of interactions involved in the mutual reciprocity domain may not be immediately apparent to the individuals involved; thus, these exchanges would not be readily viewed as sources of lesson learning. In addition, interactions in the mutual reciprocity domain are not tied to specific values and lessons are not explicitly articulated by the caregiver. Although lessons are also not explicitly articulated in the group participation domain, specific values can be identified by the learner from observing modeled behaviour. Lastly, the route between mutually reciprocal interactions and value learning may be
mediated by the positive parent-child relationship, in the context of which children are more likely to accept parental messages. For these reasons it is likely that, while interactions in the mutual reciprocity domain seem to contribute to value acquisition, it would be challenging for individuals to identify specific events in this domain which led to learning a specific lesson.

Mutually reciprocal interactions and a positive parent-child relationship can certainly contribute to children developing an internal working model that promotes acquiescence and compliance. Similarly, securely attached children are presumed to develop an internal working model that can increase the concern for others and prosocial behaviour. It is important to differentiate between internal working models and learning of specific values. While both play an important role in moral and prosocial development, only the latter was the focus of the present study.

Socialization domains and demographic variables. Although the domains of socialization are considered to be universal (Bugental, 2000; Grusec & Davidov, 2010), some cultural variation in their frequency was predicted. The hypotheses regarding cultural variations were based on existing literature regarding parenting practices by individuals of East-Asian origin. Particularly, value learning within the guided learning domain was expected to be reported more frequently because of evidence that story-telling is used by East-Asian parents to convey moral and social standards. This is in contrast to Western parents, who are more likely to use story-telling as a medium of entertainment (e.g., Steinberg, Dornbusch, & Brow, 1992). In addition, it was found that East-Asian parents used story-telling to discuss children’s past transgressions, which promoted self-improvement, as well as previous positive behaviour indicative of cognitive and moral
strengths (Miller & Lin, 2012). Discussions of previous misdeeds were not done in a disciplinary context but rather as part of casual conversations. Western-European parents predominantly told children stories about past positive behaviours, which allowed for praise around the children’s positive qualities but less so for discussions involving moral reasoning. Interestingly, none of the narratives in the present study depicted parental story-telling regarding children’s previous negative or positive behaviour. In their investigation, Miller and her colleagues observed such story-telling events over time. Therefore, when asked to recall a specific event of value learning, as was the case in the present study, individuals may have been less likely to identify these types of conversations.

In an attempt to create homogeneous ethnic background groups, stringent inclusion criteria were used. Yet, no evidence of cultural variation in the frequency distribution of socialization domains was found. This finding may reflect the fact the within-group variability is higher than between-group differences, as suggested by a study demonstrating the variability of parenting practices across different regions in the Middle-East (Dwairy et al., 2006). In addition, the main effect of domain was not moderated by interactions with other demographic variables, such as religion and level of acculturation. Therefore, the frequency distribution of domains was quite a robust finding. This provides further support to the notion that the domains of socialization approach is universally applicable.

While it was hypothesized that value learning within the control domain would be reported at younger ages, this finding was not supported in the overall sample, with the exception of females of East-Asian ethnic background.
Emotional valence of socialization domains. Interactions within the control and protection domains were characterized primarily by negative emotions, while the group participation and guided learning domains were associated with positive emotional valence. Cultural variation regarding the perceived negativity of the control domain in the East-Asian ethnic group was predicted; however, support for this hypothesis was not found. It seems, therefore, that individuals’ perception of valence across the domains was quite universal amongst the cultural groups investigated in this study.

Lesson Source

Mothers were reported to be the source of lessons in almost half of the narratives. In contrast, fathers were the source of lesson in less than a third, followed by both parents teaching the value together, which was mentioned in 10% of the sample. This may reflect the fact that, as primary caregivers, mothers spend considerably more time with their children and, therefore, may have more opportunities to teach values. Interactions between children and their fathers are less frequent than with their mothers, who are usually the primary caregivers within the family. Thus, it could be expected that these infrequent interactions with fathers would be more salient and memorable. However, this was not the finding in the current study. Grandparents, siblings and members of the extended family were each mentioned in fewer than 5% of the narratives. This finding could be a result of various factors. First, it may be an indication of the primary role parents play in value teaching within the family unit. Alternatively, lessons taught by parents may simply be more salient and thus more easily accessible. Lastly, the wording of the narrative prompt should be considered. Participants were prompted to produce a narrative about a situation where they learned a value from a person or people who raised them. While other members of the family
could have contributed to value learning, participants may not have reported those instances because they did not consider them as individuals who raised them. Since sources of lessons other than parents were mentioned in only a small proportion of the narratives, they could not be included in analyses. With a larger sample size, these analyses would be possible. Thus, an interesting direction of future investigation is whether individuals from collectivist cultures report siblings and members of the extended family to have a greater role in value teaching compared to those from individualistic cultures.

Mothers and fathers were reported to operate with similar relative frequencies across the domains in the overall sample. However, this finding was found to be moderated by the participants’ sex. Specifically, females reported their mothers operating more frequently in the control domain, while males reported their fathers operating more frequently in the guided learning domain. This finding is consistent with studies indicating that mothers rely more heavily on disciplinary action compared to fathers (Biernat & Wortman, 1991; Lytton & Zwirner, 1975; Nobes et al., 1999; Power et al., 1994; Xu et al., 2000).

**Lesson Content**

Four types of lesson content were predominantly reported in narratives, namely, inhibition of antisocial behaviour, initiation of prosocial behaviour, importance of work-ethic, and prudential lessons. Values relating to inhibition of antisocial behaviour were most frequently reported (in more than one quarter of the narratives) but did not significantly differ in frequency from work-ethic and prudential lessons. Values of inhibition were reported significantly more frequently than prosocial lessons. The predominance of lessons around inhibition of antisocial behaviour is not surprising, considering the documented high
frequency of misdeeds and non-compliance by children (Bergin & Bergin, 1999; Forman & McMahon, 1981; Polak & Harris, 1999; Power, McGrath, Hughes, & Manire, 1994). In addition, transgressions and non-compliance necessitate parental response more than other behaviours; thus individuals would have experienced many instances of such interactions.

Lessons of work-ethic were equally as prominent. This is also not surprising considering that participants were first-year university students, for whom issues around working towards achievement goals are quite relevant and salient. Prudential lessons were also mentioned with equivalent frequency. Issues around personal safety and self-care would be quite prominent for this population of first-year university students given that a good portion of the participants would have moved to live outside of their parents’ house for the first time.

There is evidence that children accept different levels of parental interventions depending on the type of issue at hand (Smetana, 1997). Thus, it is likely that values of different content need to be socialized differently and teaching of specific lessons may be more successful in the context of certain socialization domains. Based on the finding that caregivers discipline their children more readily for antisocial acts compared to failing to act prosocially, it was hypothesised that values of inhibition of antisocial behaviour would be mentioned most frequently in the control domain. This hypothesis was supported, with lessons of inhibition reported significantly more frequently in the control domain compared to all other domains. This finding is consistent with the notion that issues concerning antisocial behaviour are generally considered immutable; thus children would be willing to accept high levels of parental control regarding these issues.
The second most frequent value content in the control domain was work-ethic. Although work-ethic lessons seem more personal in nature, they can also be considered somewhat immutable because lack of work on the part of one person often results in someone else having to complete the task. In addition, issues of work-ethic would be expected to be prominent and important to a sample of university students. Values relating to prosocial and prudential issues were reported least in the control domain compared to the other two lesson types. As suggested by existing research findings, this may be because children are less willing to accept parental control in these areas.

Lessons of a prudential nature were most frequently mentioned in the protection domain. When children experience distress, it provides an opportunity for discussion about safety and personal well-being. Based on existing research findings, which suggest that participation in group routines and rituals predicts prosocial behaviour (Grusec, Goodnow, & Cohen, 1996; Hart, Atkins, & Ford, 1999), as well as the results of the previous study by Vinik et al. (2013), it was expected that prosocial values would be reported most frequently in the group participation domain. This hypothesis was supported, which also replicated the results of the previous study. Therefore, these findings highlight the importance of positive role-modeling and group routines for the promotion of concern and prosocial behaviour towards others in need.

Lastly, interactions in the guided learning domain were not associated with one specific type of lesson content. Due to the representational and abstract nature of interactions in this domain, any lesson could be addressed in this context. For example, parents and children can engage in discussions about the importance of helping people in need or working hard to achieve personal goals. Interestingly, lessons of inhibition of antisocial
behaviour were mentioned significantly less than all other lessons in the guided learning domain. This may be indicative of parents being reluctant to bring up issues of antisocial behaviour outside of the discipline situation. In addition, such a topic may turn a positive and casual discussion into a confrontation, moving the interaction into the control domain. Alternatively, casual discussions that do not involve topics of negative behaviour may be more salient and thus more easily accessible. Such discussions may occur less frequently and thus be more unique and memorable.

These findings provide support for the notion of domain specificity, with specific lessons suited to different socialization domains. Nevertheless, it is important to note that all four types of lesson content were reported to be successfully learned, at least on some occasions, in all domains that emerged from narratives. Therefore, domain specificity does not imply that particular lessons can be successfully socialized exclusively in certain domains. After all, individual differences in learning style and preference is another important factor to consider when teaching values, as some children may simply be better suited for learning certain values in particular socialization domains.

An unanticipated finding of cultural variation amongst types of reported lesson content emerged. Specifically, participants of Middle-Eastern ethnic background origin reported significantly fewer lessons of inhibition of antisocial behaviour compared to all other ethnic background groups. It is possible that participants of Middle-Eastern background simply reported learning lessons at older ages, by which time children are expected to have learned and internalized these immutable values. Further analyses did not support this reasoning, however, as there was no significant interaction between ethnic background, lesson content and age at the time of the reported event.
The finding of Middle-Eastern participants reporting fewer lessons of inhibition of antisocial behaviour can be the result of several factors. First, while the difference was not significant, participants of Middle-East origin reported more lessons of a prudential nature. Therefore, it is possible that issues around personal safety and personal well-being were more prominent in this group. Alternatively, it is possible that the expectation to refrain from antisocial acts is strictly enforced, which leads to higher compliance in that type of behaviour and, thus, fewer opportunities to teach the lesson explicitly. Lastly, teaching of values about inhibition of antisocial behaviour is perhaps accomplished in a different context, such as the school or religious setting. Further investigation is required to shed light on these issues.

Socialization Domains and Value Internalization

All the values described by participants in their narratives should be considered internalized to some degree because they were prompted to report situations that resulted in their “taking in” the lesson. However, various levels of internalization could be distinguished. Internalization of values described in narratives was assessed in two ways: presence of meaningful processing within the narratives and the self-reported reason for successful learning of the value. These measures were found to be related, indicating that both were tapping into a common construct.

It was hypothesized that values learned in the control domain would be associated with the lowest internalization level, those learned in the protection and group participation domains would be associated with moderate levels of internalization, and values learned in the guided learning domain would be most highly internalized. With regard to the first internalization measure, this hypothesis was not supported, as narratives describing the group
participation domain were significantly more likely than those in all other domains (with the exception of the protection domain, where the difference approached significance) to have evidence of meaningful processing.

With respect to the second measure of value internalization, reason for successful learning, the hypothesis was only partially supported. Consistent with predictions, values learned in the control domain were associated with extrinsic and introjected motivation (fear of punishment and self-oriented distress), indicative of low internalization levels. Values reported to have been learned in the protection domain were associated with identified motivation (trust that the caregiver has the child’s best interest in mind), indicative of moderate levels of internalization. This was also in line with expected findings. However, contrary to expectations, values learned in the group participation domain were associated with integrated motivation (cognitive processing), which is indicative of high internalization. Notably, the group participation domain differed significantly only from the control domain but not guided learning and protection domains.

Taken together, these findings indicate that the discipline context is not ideal for promoting value internalization, as it leads to lesson learning that is motivated by extrinsic and introjected reasons. In the absence of the external motivators, such as fear of punishment or expectation of reward, individuals would be less likely to act in accord to values learned in this manner. Situations involving the child experiencing distress appear to be a better context for value learning, as lesson in the protection domain context were motivated by the personal importance of the value (identified motivation).
An unexpected finding that emerged from this study was that the group participation domain was found to be associated with high levels of internalization indicated by both measures used in the present study. This finding highlights the important role of modeling and routines for value internalization. Vinik et al. (2013) found that emerging adults reported the self to be one of the most frequent sources of successful lessons, which points to the importance of personal construction of values. The group participation domain seems ideal for self-construction of values because observed behaviour can often be related to a specific value (e.g., observing someone helping a person in need is related to a prosocial value), unlike in the mutual reciprocity domain. In addition, in the group participation domain, unlike in the control, protection and guided learning domains, the caregiver does not explicitly articulate or discuss the value, which allows the learner to construct the value independently.

The effect of emotional valence on learning is another factor to consider when evaluating the effectiveness of different domains for value internalization. Evidence suggests that, when negative emotional arousal is high (e.g., fear), cognitive resources are occupied with emotion regulation, which can interfere with information processing required for successful learning (Thompson, 1990). Consistent with this notion, participants who reported the presence of positive and absence of negative valence indicated significantly greater accuracy and clarity of the memory. Thus, as there was no interference of negative emotions, individuals could encode better and later report those details with accuracy in their narratives. In contrast to hypotheses, no interactions were found with ethnic background, providing further support for the universality of the socialization domains as defined by Grusec and Davidov (2010).
Narrative Coherence

Narrative coherence did not differ across socialization domains. Generally, the narrative coherence variable may have been less applicable in the current study because, unlike most narrative-based research, participants were required to describe a single event of value learning rather than a life story or a self-defining event.

Practical Implications for Parenting and Value Socialization

Findings from the present study have important practical implications for parenting and value socialization. All types of value content were reported to be successfully learned in the four domains investigated in this study. However, it was also evident that specific lessons were more likely to be associated with particular domains. Therefore, teaching values within the most suitable domain may contribute to more successful lesson learning.

If parental goals include value internalization, teaching within the context of discipline and conflict was demonstrated to be least effective in achieving such an outcome. Findings suggest that lessons learned in the control domain were associated with the lowest levels of value internalization. Instead, it may be more beneficial if parents create conditions where children are exposed to situations relevant to specific values but allow them to deduce the lessons independently. Based on the results of both the current and the previous study (Vinik et al., 2013), this was achieved best in the context of modeling desirable behaviour.

Limitations and Future Directions

Examining reports of previous value-learning events that remained salient years later can shed light on important aspect of the value acquisition process from the perspective of the learner. However, this methodology relies solely on retrospective reports, which may not
be an accurate representation of actual events. In fact, it is quite possible that some participants fabricated their responses. Genuine reports could have been influenced by personal biases and opinions about how value learning occurs. Additional biases affecting the types of events recalled could have resulted from the limited sample group, first-year university students. In fact, many of the narratives described events relating to schooling and achievement, which may simply reflect the fact that these issues are particularly salient for this group. The participants in this study were also largely from highly educated families. Since the study sample was not representative of the larger population, findings should be replicated with a more representative sample.

It is also important to consider that one event of value-learning may not be generalizable to all the instances when values were learned. The narratives produced by participants in the current study are a depiction of an isolated incident, which may have been recalled particularly because of its uniqueness. Therefore, conclusions must be interpreted with caution. In addition, interactions between parents and children are complex and, thus, they can operate in more than one domain at the same time or move rapidly from one domain to another. These complex and nuanced interactions may have not been fully recalled by participants and thus not reported in the narratives.

Another important limitation of the study is that information about all variables was self-reported and did not include any behavioural measures. In addition, data were collected from a single source. Therefore, in future investigations reports about the process of value acquisition should be collected from multiple sources. Of particular interest is the parental perspective. An important research question to address is in which socialization domains caregivers recall teaching values and whether those match the perspective of the learner. In addition, it would be informative to collect information about the same value-learning event
from the learner and the caregiver’s perspective. As such, children and parents could be prompted to come with a value-learning event which they both recall and asked to produce a narrative regarding that event. Lastly, while this study investigated the variables involved in successful value learning, it would be equally important to identify the processes of unsuccessful lesson teaching.

**Conclusions**

Despite the limitations, the present study provides important insights into the process of value acquisition within the family unit. Although participants’ autobiographical narratives may not accurately represent the actual events that transpired, they provide a window into the current conceptualization of events and thus the way in which the learner believes his/her values came to be constructed. In turn, it is this construction that affects actual current action. The findings of the present study expand on previous work by Vinik et al. (2013) and provide further support for the applicability of the domains of socialization approach to the study of value development. Values learned in the context of the control domain, which mainly involved misdeed, were most salient and frequently reported. However, values learned in this context were associated with low levels of internalization. The highest level of value internalization was found to occur in the group participation domain, drawing attention to the importance of observing the behaviour of others. Socialization domains were associated with particular types of lesson content, indicative of domain specificity. The guided learning and group participation domains were associated with more positive and less negative emotional valence compared to the control and protection domains. In turn, absence of negative valence was significantly related to better confidence in accuracy of memory reported in narratives, indicative of quality of information processing and learning. Interestingly, most effects were not moderated by demographic
variables, such as cultural background, religion and acculturation level. All in all, then, the findings of the present study do indicate that viewing socialization as domain-specific can be a useful tool in understanding essential aspects of children’s socioemotional functioning. Moreover, it is a tool that appears to be useful regardless of cultural context.
References


Bandura, A. (1977a). *Self-efficacy: Toward a unifying theory of behavioral change*


Appendix A: Ethnic Background Inclusion Criteria

East Asian
1. China (Mainland)
2. China (Hong Kong)
3. China (Taiwan)

South Asian
1. India
2. Pakistan
3. Sri-Lanka

Middle Eastern
1. Lebanon
2. Syria
3. Jordan
4. Egypt
5. Iraq
6. Iran
7. Saudi Arabia
8. Yemen
9. United Arab Emirates
10. Kuwait
11. Turkey
12. Qatar
13. Oman
14. Bahrain

Western European
1. England/United Kingdom
2. Ireland
3. Denmark
4. Belgium
5. Germany
6. France
7. Switzerland
8. Holland/Netherlands
9. Norway
10. Sweden
11. Finland
12. Iceland
13. Luxembourg
14. Austria
Appendix B: Vancouver Acculturation Measure

Please answer each question as carefully as possible by selecting one of the numbers below each statement to indicate your degree of agreement or disagreement with the statement.

Many of these questions will refer to your heritage culture, meaning the culture that has influenced you most (other than North American culture). It may be the culture of your birth, the culture in which you have been raised, or another culture that forms part of your background. If there are several such cultures, please try to identify a culture that may have had an impact on previous generations of your family.

134) Please state your heritage culture in the space provided:
________________________________________________________________________

135) I often participate in my heritage cultural traditions.

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136) I often participate in mainstream North American cultural traditions.

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137) I would be willing to marry a person from my heritage culture.

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138) I would be willing to marry a North American person.

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139) I enjoy social activities with people from the same heritage culture as myself.

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140) I enjoy social activities with typical North American people.

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141) I am comfortable working with people of the same heritage culture as myself.

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142) I am comfortable working with typical North American people.

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143) I enjoy entertainment (e.g., movies, music) from my heritage culture.

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144) I enjoy North American entertainment (e.g., movies, music).

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145) I often behave in ways that are typical of my heritage culture.

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146) I often behave in ways that are 'typically North American'

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147) It is important for me to maintain or develop the practices of my heritage culture.

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148) It is important for me to maintain or develop North American cultural practices

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149) I believe in the values of my heritage culture

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150) I believe in mainstream North American values

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151) I enjoy the jokes and humor of my heritage culture

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152) I enjoy typical North American jokes and humor

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153) I am interested in having friends from my heritage culture

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<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Neutral/</th>
<th>Agree</th>
<th>Strongly</th>
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154) I am interested in having North American friends

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Appendix C: Narrative Prompt and Follow-up Questions

Please think of important values you have that help to guide the way you live your life (for example: helping people in need, being honest, not hurting people's feelings, being responsible for your actions, working hard). Try to think about how you acquired these values and life lessons from the person(s) who were primarily responsible for raising you (e.g., parents, grandparents, aunts/uncles, siblings).

Think back to a time in your life that involved you learning an important value from the person(s) who raised you. In this situation, the person(s) who raised you was successful in teaching you this value, that is, you really took it in and applied it to the way you lead your life.

Please pause and take a few moments to remember the circumstances and details of the event (where you were, who you were with, what happened, what you were thinking and feeling). This event can be from any period in your life, but it should be AT LEAST ONE YEAR OLD.

1) What was your approximate age at the time of this event?

2) Please describe the details of this event.

Please answer the following questions with regards to the event you just described. You may have provided these details already in your description of the event, so some of the questions may be repetitive. However, please take the time to answer each question by choosing the options that apply.

3) What prompted this event? Please choose ALL that apply.

   [1] You did something bad/ you misbehaved or your care-giver(s) or other adults thought you did something bad/ you misbehaved

   [2] You were in distress and wanted comfort

   [3] You did something good or your care-giver(s) or other adults thought you did something good

   [4] Your sibling did something bad

   [5] Your sibling did something good

   [6] You observed your care-giver(s) behaviour

   [7] You were discussing a future event with your care-giver(s) (e.g., going to a party or an upcoming exam)

   [8] You asked your care-giver(s) for advice
[9] You began a conversation with your care-giver(s) that did not involve a specific future event or seeking advice

[10] Your care-giver(s) began a conversation with you that did not involve a specific future event

[11] Not applicable to this situation

[12] Cannot remember

[13] Other (Please specify)

4) If you chose more than one option in the previous question, please indicate the order in which these events occurred.

5) Who taught you the value? Please indicate ALL that apply.

   [1] Mother
   [2] Father
   [5] Sibling
   [6] A member of my extended family (e.g., aunt, uncle, cousin)
   [7] Other (Please specify)

6) If you chose more than one option in the previous question, rank them according to how much each source contributed to you learning the value. [e.g., 1-mother; 2-father] If they were of equal importance, please indicate so.

7) Why were they successful in teaching you the value? Please choose ALL that apply.

   [1] It made me think about the event
   [2] I agreed with the lesson
   [3] I felt bad for another person(s)
   [4] I felt guilty
I trusted the person who was teaching me the lesson because they are knowledgeable and experienced.

I trusted the person who was teaching me the lesson because I know they have my best interest in mind.

I was afraid of being punished.

Not applicable to this situation.

Cannot remember.

Other (Please specify).

8) If you chose more than one option in the previous question, please rank them in order of relevance.

9) What value have you actually learned?

10) How positive is this memory for you?

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11) How negative is this memory for you?

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<th>Not at all</th>
<th>Somewhat</th>
<th>Very</th>
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12) How confident are you that the event really unfolded as you have described?

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<th>Not at all confident</th>
<th>Very Confident</th>
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Appendix D: Participant Informed Consent Form

I, ____________________________ (participant’s name) have been asked to participate in a study concerning learning important values and life lessons. This study will be carried out at Dr. Joan Grusec’s laboratory at the Child Study Centre of the University of Toronto.

I have been informed that the study will consist of an hour and a half long session for 2 PSY100 course credits. During the experiment I will complete several questionnaires, write about my past experiences of learning important values and life lessons and then answer questions about those experiences. In addition, I understand that I will be asked to provide demographics information. The information I provide will stay confidential. I will be assigned a participant number, and identifying information (such as my name) will be used only for granting course credit.

I have been informed that there are no right or wrong answers to any of the questions I will be asked in this study. The study will be conducted by an experienced experimenter, and there are no risks involved in this procedure. I have been advised that my participation is voluntary and should I wish to discontinue my participation at any time I may do so without penalty. I may also refrain from answering any questions or doing any of the activities if I don’t want to. I may refuse completing any part of the experiment and I can participate as an observer to obtain PSY100 course credit.

I have been notified that all data collected during this study will be stored in a locked room, available only to the researchers at the Child Study Centre. I understand that, in keeping with the policy of the American Psychological Association, data will be held for 5 years following the completion of the study, at which time they will be erased.

I understand that the data gathered may provide answers to important questions about children’s acquisition of values, and that the aim of the study is to obtain data about the contexts and the manner in which children learn these values. As the researchers are examining the data as a group (rather than on an individual basis), the data will not provide a specific evaluation of my behaviour, nor will they be used to provide any diagnoses of problems or disabilities.

I have been advised that the data will be used for research purposes only. The researchers intend to publish the results of this study in an academic journal and in reporting these results, participants will not be identified in any way. I consent to the publication of the study results, so long as they are presented in a manner that does not identify me.

I understand that if I have any further questions or concerns, I should share these with the researchers and they will be glad to answer any questions or address concerns in regard to the procedures of this study. I may also contact the Ethics Review Office (ethics.review@utoronto.ca 416-946-3273) if I have any questions about my rights as a participant. If I wish to receive a
summary of the results upon completion of the study, I can provide the experimenter with my e-mail address.

Julia Vinik, MA, Joan Grusec, Ph.D.

Tel. (416) 978-5373

Child Study Centre, Department of Psychology, 100 St. George street, Toronto, ON M5S 3G3

********************************************************************************

I have read and understand the above explanations, and consent to participate in this study.

_________           ______________________________________________________
DATE                     SIGNATURE

********************************************************************************
Appendix E: Participant Debriefing Form

1. The general area of psychology in which the study belongs: Developmental Psychology

2. Brief summary of background or problem: The development of morality is one of parents’ critical goals in the process of children’s socialization. Many contemporary thinkers and researchers offered their theories of parental contribution to children’s moral development and acquisition of values. While the body of research on children’s acquisition of values is extensive, the majority has been focused on parental responses to children’s misbehaviour. While children’s misdeeds offer parents a great opportunity to teach moral lessons, it may not be the only circumstance in which children acquire values from their parents. Indeed, the socialization process occurs in several domains of parent-child interactions, as proposed by the Domains of Socialization Approach (Grusec, 2007). In addition to situations of misbehaviour and conflict, where the parent assumes the position of an authority figure (Control Domain), the parent can also be the protector in times of distress (Protection Domain), a teacher of skills (Guided Learning Domain), a manager of the child’s environment (Group Identification Domain) or even an equal partner (Reciprocity Domain). According to the Domains of Socialization Approach, the principles that govern change depend on the domain in which the parent and child are operating. While the principles governing children’s acquisition of values have been identified and extensively researched in the Control Domain, much less attention has been given to that process in the other domains of socialization. A recent pilot study conducted in our lab suggests, in fact, that this attention is warranted, as it demonstrated that children report learning just as many moral lessons in the context of a neutral conversation with their parents as they do in the context of a misdeed. In addition, this study also demonstrated that children successfully learn moral values not only when parents employ disciplinary techniques, but also when non-disciplinary methods are used, such as, story telling, sharing own experiences and modeling positive behaviour. Therefore, the present study further explores the process of children’s acquisition of values in contexts that do not involve misdeed or disciplinary action.

3. General description of the study: Participants are asked to produce 3 narratives about past experiences that involve learning important values and life lessons. For the first narrative, participants are given the option to produce a narrative from any context. For the second and third narrative participants are asked to produce narratives about experiences from their childhood when their care-givers either successfully or unsuccessfully taught them an important value. Following each narrative, there are several questions regarding the details of the event described. In addition, participants are asked to complete several questionnaires: regarding the people from whom they learned important life lessons; regarding their parents’ tendency to use specific techniques in situations when teaching values; a measure of acculturation; and a measure of internalization of values. Participants
belong to one of 4 ethnic groups: East Asian (Chinese), South Asian (Indian, Pakistani, Sri-Lankan), Middle Eastern and West-European.

4. **Specific hypotheses tested:** Cultural differences are expected in the methods used by parents to teach their children important lessons. Specifically, it is expected that participants of East and South Asian backgrounds will report more frequent use of power assertive disciplinary methods by their parents in comparison to the Western-European group. In addition, it is expected that participants from these cultural groups will report that their parents employ non-disciplinary methods, such as story-telling, more often than their Western-European counterparts. Lastly, based on the Domains of Socialization Approach, it is expected that participants of all cultural backgrounds will report that lesson teaching is more successful when the parent initially responds in a method that is suited to the domain in which the child was operating.

5. **Independent variable(s):** Ethnic background.

6. **Dependent variable(s):** Parenting method used to teach important values.

7. **Control procedures:** The level of acculturation to the main stream Canadian culture is used as a control variable.

8. **Implications for theory or for practice:** If the study reveals that individuals report learning important values and life lessons in situation other than those involving misbehaviour, misdeeds and disciplinary action by their parents, it indicates that the focus of research in this area needs to widen to include non-disciplinary situations. In addition, it is important to identify and further investigate cultural variation in parenting techniques used to teach values.

9. **Reference to the current literature:**


10. **A reference to relevant pages in the PSY100 text:**

Thank you for participating or observing this study. Your participation is very much valued by our research team.

If you have questions after you have completed the study, you can contact the researcher, Julia Vinik (416) 978-5373. You can also contact Professor Joan Grusec, the research supervisor, at (416) 978-7610.
Appendix F: Research Assistant’s Instructions

When the participant arrives at the lab.

Hi, what study are you here for? Are you (confirm participant’s name)? Thank you so much for coming to participate in this study. First I just want to make sure that you fit our inclusion criteria:

Are you 21 years of age or younger?

Do you belong to one of these ethnic groups? Are both your parents from the same ethnic background? Show participant(s) the Ethnic Group Sheet. Keep in mind the current exclusion criteria.

If no – Unfortunately you do not meet the inclusion criteria for this study. Did you read the description of the PSYNup system, and get our confirmation email about the inclusion criteria?

I am so sorry, but you will not be able to participate in this study. I will cancel the study without any penalty to you. So you will not lose any marks. Resolve the appointment by canceling without credit.

If yes (note that participants must meet BOTH age and ethnic background inclusion criteria) – That’s great!

So I’ll start by telling you a little bit about the study and let you know what you’re going to be doing.

In this study we are looking to investigate the process of how people learn important values and life lessons.

The study will take about an hour and a half and you will receive 2 PSY100 course credits. During the study you will do a few different things. First, you will be asked to provide some demographics information, like your age, gender and so on. Then you will be asked to complete several questionnaires, write about 3 different past experiences of learning important values and life lessons and then answer questions about those experiences. You’ll be able to take a break if you need to about half way through the study.

All the information you provide will stay confidential. You will be assigned a participant number, and your identifying information (such as your name) will be used only for granting course credit.

It’s important to remember that there are no right or wrong answers to any of the questions you will be answering in this study. We just want you to answer as honestly as you can.

Your participation in this study is completely voluntary. This means that if you don’t want to answer a specific question, you don’t have to, but we’ll really appreciate if you answer all the questions. Also if you wish to discontinue your participation at any time, you may do so without
penalty. You can choose to participate as an observer in order to obtain your PSY100 course credit instead.

Do you have any questions so far?

The data we are collecting will provide answers to important questions about people’s acquisition of values. The main goal of the study is to obtain data about the contexts and the way in which children learn these values.

We will be examining the data as a group (rather than on an individual basis), so we will not be looking at your data in isolation. Instead we’ll combine it with all the other participants and will be looking for trends. The data we collect will be used only for research purposes. We hope that we will be publishing the results of this study in an academic journal but participants will not be identified in any way.

Do you have any questions about any of this?

*Give the participant(s) the consent form.* Here is the consent form. It describes everything that I just outlined for you. Take a few minutes to read it and sign it when you’re ready. *Let the participant(s) read the form on his/her own and sign it.*

You will be completing the study on the computer. If you prefer, you can do it in paper and pencil form. Would you be OK with completing the study on the computer?

If no, *provide the participant(s) with a hard copy of the questionnaire and a pen. Have them complete the questionnaire on the same desk where the computer is.* – OK, here is a hard copy of the questionnaire and a pen. You can have a seat here and complete it.

If yes – That’s great. Let me show you how to complete the questions on the computer.

Do you have any questions about how to complete the survey on the computer?

If you have any questions at all during the study, feel free to ask me and I will be glad to answer them.

I will be in the main lab, the big room you came in to.

Once you’re done, you can come and get me from the main lab.

Do you have any questions before you start?

So when you’re ready to start, just click on the “Next” button.

*Debriefing*
Thank you again for participating (or observing) in our study. Your participation is really important to us.

*Give the participant the debriefing form.*

This is some more detailed information about the study. Please take some time to read through it and then I’ll ask you a question about the study when you are done reading it. When you’re finished, just come and get me. I’ll be right outside the room. Take your time.

*When the participant finishes reading through the form, come back and give him/her the following description of the study.*

So I’ll give you a quick description of the purpose of the study.

The main purpose of this study is to find out where and how people learn important values and life lessons. Most people think it is when children do something bad, and their parents punish them. This is called the control domain. But there are other situations where values can be learned. So we are doing this study to learn more about people’s acquisition of values in situations that do not involve misbehavior or parents disciplining them.

Another important aspect of the study is to find out if the process of learning values is different depending on ethnic background. And that’s why we have participants from four different backgrounds in this study.

Do you have any questions?

I will be updating the online system to show that you successfully participated in this study, so that you will get your credit. Here is your paper confirmation of participation. *Give the student the receipt form and the blank consent form.*

Just a few quick questions before we finish.

Would you be interested in hearing about the results of this study?

*If yes* – That’s great. Should we email you a summary of the results when they become available to the same email address as the one we used to send you the study reminder email? *Write the participant’s email address on the participant information form and indicate that they are interested in getting the study results.*

Also, if we have any quick questions about the experiences that you wrote about and would like a clarification, would you mind if we email you in the next 2 days? It wouldn’t be anything long, just a quick clarification. We won’t ask you to come in or anything like that. *If OK with that* – That’s great!! Thank you.
If you have any questions at all about the study, you can contact the researcher, Julia Vinik or the research supervisor Professor Joan Grusec. You have the numbers on the debriefing form right here (point to debriefing form).

Thank you again for participating in our study. The information you provided is really valuable to us.