Precursors to successful youth-adult partnerships: The role of adult warmth and expertise

By

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ABSTRACT

Youth-Adult Partnerships (Y-APs) have been found to foster youth engagement and positive youth development. However, existing research tends to confound the characteristics of Y-APs with their general outcomes and the existing methods of evaluating Y-APs tend to be based on correlational methodologies. I sought to create a measure of Y-AP success that did not confound the characteristics of a successful Y-AP with its outcomes. Using the existing literature as a guide, three components were selected for inclusion in the Y-AP success measure: 1) perceptions of productivity; 2) positive affect; and 3) having one’s contributions welcomed and considered. Using this new measure, I tested a model to assess how adult warmth and expertise interacted with task difficulty to influence three components of Y-AP success. Participants included 402 university students ($M = 19.27$, $SD = 1.28$, 89.1% female) from Brock University and Cape Breton University. Video clips of an adult, depicting all possible combinations of warmth and expertise were created for this study, as well as a pair of hypothetical tasks designed to elicit differential degrees of perceived difficulty. Participants were exposed to one video of a hypothetical adult and two hypothetical tasks and responded to the Y-AP success measures twice, for each of the tasks. Results from mixed-model ANOVAs revealed that the adult and task characteristics were not consistently related to all components of Y-AP success. However, several significant interactions suggested that youth perceptions of task difficulty and their impressions of adult partners influenced the extent to which they expected a Y-AP to be successful. The results are discussed in the context of how they support or conflict with the existing literature and serve as a first step in the inference of causality within the study of Y-APs.
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Precursors to successful youth-adult partnerships: The role of adult warmth and expertise

Overview

Researchers have linked youth-adult partnerships (Y-APs) to youth engagement and, in turn, positive youth development. If authors agree on the positive benefits of Y-APs and seek to promote their development and success, there is a need to discern which factors contribute to the success of a Y-AP and how their outcomes can be optimized. This poses a challenge, as it can be difficult to tease out causal factors within the context of a dynamic two-way relationship. Although it would be ideal to observe real-life partnerships between youth and adults, especially since youth and adults both stand to gain from the formation of successful Y-APs, it is perhaps more practical to focus on a limited range of partnership dimensions when trying to ascertain causality. As such, the scope of this study was narrowed in two ways to support my goal of exploring causal factors within Y-APs. First, I employed the use of hypothetical partners and tasks to measure perceptions and expectations toward a proposed partnership. Second, I only focused on the perceptions and expectations of youth toward a hypothetical adult partner, not the perceptions and expectations of adults toward a hypothetical youth partner.

Given these parameters, I developed a model (See Fig. 1) to summarize the benefits of successful Y-APs and to incorporate the factors that may contribute to the relative success of a partnership from the perspective of the youth partner. My model depicts two things, 1) My prediction that adult variables (warmth and expertise) and youth perception of task difficulty will influence three essential components of a successful Y-AP (productivity, positive affect and contribution); and 2) The existing link between successful Y-APs with youth engagement and, subsequently, positive youth
development. My model outlines why Y-APs are important and also what factors may contribute to its success. It is important to note that not all elements presented in the model have been measured in this study. Rather, the purpose of this model is to be used as a helpful framework to present how the variables that are manipulated and measured in my study have been linked, within a broader context, to important potential outcome variables.

Figure 1. Youth-Adult Partnership Success Model

In this section, I will first discuss the role of Y-APs in facilitating youth engagement and, in turn, positive youth development. I will contrast Y-APs to other types of youth-adult relationships, discuss possible barriers to the formation and survival of Y-APs, and discuss how Y-APs have been conceptualized in the research literature. I will then propose a definition of Y-AP success, which is comprised of three “successful partnership” measures that have been created for this study: (1) youth perception of productivity (“Productivity”); (2) positive youth affect towards adults (“Affect”); and (3) youth perceptions of having their contributions considered and welcomed (“Contributions”). Having explained my working definition of Y-AP success, I will then provide additional detail regarding the primary purpose of my study, which is to explore
how two input variables - adult characteristics and youth perception of task difficulty - may predict the success of Y-APs, both individually and in interaction with each other. In particular, I explored how perceived adult warmth, adult expertise and task difficulty influenced three selected components of Y-AP success.

**Youth-Adult Partnerships**

Y-APs can be defined as relationships in which youth and adults work together toward one or more shared goals. A successful Y-AP is one in which “there is a mutuality in teaching and learning and where each age group sees itself as a resource for the other and offers what it uniquely can provide” (The National Commission on Resources for Youth, 1974, p. 227). A Y-AP can be considered successful, whether youth or adult-driven (Larson, Walker, & Pearce, 2005), as long as there is “mutuality of teaching and learning” and youth are granted power in decision making. When successful, these qualities – mutuality of teaching and learning, youth power in decision making, and the provision of resources by both parties – differentiate Y-APs from “parent–child, student–teacher, and mentoring relationships” (Camino, 2000, p. 12) and can provide unique benefits to both parties.

**Youth-Adult Partnerships Compared to Other Youth-Adult Relationships**

Although youth may encounter and interact with adults on a regular basis, it is important to consider that not all youth-adult relationships are partnerships. The most common adult relationships for most youth are, arguably, familial relationships and teacher-student relationships (Darling, Hamilton, & Shaver, 2003), followed by mentors of various kinds (e.g., coaches). Interactions with adults may be limited both in frequency
and diversity as the result of societal reinforcement of age segregation in North American society (Sullivan & Larson, 2010).

While not dismissing the unique influence of these adult roles in the lives of youth, it is important to recognize the power imbalances that may be inherent in these relationships. As a result, despite the many benefits that teachers, family members and mentors may afford youth, these adults may be less suited to providing youth with opportunities to practice adult-like interactions (e.g., persistence, confidence) (Osgood, Foster, Courtney, 2010), compared with adult partners in successful Y-APs.

This is not to suggest that all familial and teacher-student relationships are hierarchical, nor should it be inferred that Y-APs are inherently egalitarian in nature. Depending on the task at hand and the expertise of both partners, one partner in a Y-AP may depend on the other to a greater extent than her partner depends on her. This sort of situation exists outside of Y-APs as well – consider individuals who have recently started working or volunteering with an organization. They may have education and background experience comparable to those of the people with whom they work. Given that they are new to the organization, however, they may be at a natural disadvantage because they have not yet familiarized themselves with the inner workings of the organization. The more senior members may take it upon themselves to help their colleagues adjust to their new work environment. During this time, the colleagues who are facilitating the integration of the new members arguably have the upper-hand in their partnerships, but it is unlikely that the newer members would be completely dominated or have their input dismissed. Why? Consider how the newer members are perceived by both their colleague and the organization as a whole: they are acknowledged as having valuable
knowledge and unique experiences. The organization has included them because they value what the new member can bring to the table. Last, and perhaps most importantly, it is recognized that their initial disadvantages within the organization exist only because of their lack of experience within that particular work environment. With a bit of guidance, the contributions of the new members will further their company’s goals.

This integrative process can be considered an analogy for how youth should be viewed within a Y-AP; their contributions, knowledge and experiences should be recognized and the initial power disadvantage they may experience when working with an adult may be a temporary adjustment phase in which the youth adjusts to the specific requirements of the partnership. In short, the youth has much to teach and offer. It is the mutuality of teaching and learning within a Y-AP that allows it to “fill the gap” where parents, teachers and mentors leave off. This mutuality of teaching and learning as a dominant feature is what differentiates Y-APs from typical parent/child, teacher/student and mentoring relationships.

While an imbalance of power might lead to a hierarchy in some interactions between adults and youth in a well-functioning Y-AP, both partners will be given the opportunity to contribute and have their views considered when making decisions and working toward a shared goal. Issues stemming from an imbalance of power should only arise if the adult approaches the partnership in a patronizing or over-controlling manner (Camino, 2005; Camino & Zeldin, 2002) or, likewise, if the youth does not respect the contributions of the adult partner. In other words, as long as the contribution of both partners is respected, a Y-AP will continue to function in situations where one person may have greater expertise than the other.
A Y-AP partnership model asserts that "agency and community programs are better served when youth and adults work together in partnership to develop, implement and evaluate initiatives and programs, and calls for a balance of power between youth and adults in program planning and decision making" (Wunrow & Einspruch, 2001, p. 170). One of the potential outcomes of a successful Y-AP is the development of youth engagement which, in turn, can benefit youth, adults and society, when youth exercise their engagement rights.

Youth Engagement

Youth-Adult Partnerships and Youth Engagement

Engagement can be defined as "the meaningful participation and sustained involvement of a young person in an activity, with a focus outside of him or herself" (Pancer, Rose-Krasnor, & Loiselle, 2002, p. 2). I will now discuss Y-APs as potential venues through which youth may become engaged. Engagement within the context of a Y-AP may have numerous benefits, especially when one considers the skills that youth must acquire if they are to successfully transition to autonomous adulthood. These skills include initiative, planning, effective communication (Larson, 2000), development of efficacy, a critical consciousness, and a sense of empowerment (Watts & Flanagan, 2007). Engagement through Y-APs can also provide youth with "bridging social capital", which comprises contact with people who have information and resources that would not normally be accessible to youth (Fisher, 2004; Bernard, 1991; Putnam, 2000). Through acquiring bridging social capital, youth may be able to become engaged in a wider range of activities than they would have without access to the resources afforded to them by adults. In addition, by engaging youth alongside adults, the potential exists for
the dismantling of negative adult-held stereotypes about youth. If adults are given the opportunity to witness first-hand the contributions of youth, then the status of youth in our society may improve as more and more adults come to see the value of engaging youth. As a result, engaging youth through Y-APs indirectly may lead to an increase in opportunities for youth to become engaged in the future.

Youth engagement may also facilitate positive youth development (PYD) (Damon, 2004) by providing youth with venues in which they can develop the “6 C’s” of PYD: competence, confidence, character, connection, caring (Lerner & Thompson, 2002) and contribution (Lerner, 2004). PYD has been described as a strength-based perspective on youth development (Lerner, Almerigi, Theokas, & Lerner, 2005). It opposes the concept of adolescence as a time of stress and turmoil and instead presents this life stage as a period of tremendous growth and potential. Researchers have suggested that adults can play vital roles in facilitating PYD (Lerner, 2004) and through engagement within a successful Y-AP, PYD can be facilitated when adults deliberately draw attention to youth strengths (Pittman, Irby, Tolman, Yohalem, & Ferber, 2002; Roth & Brooks-Gunn, 2003a,b) and when youth skill building and youth leadership are promoted (Lerner, 2004).

In previous research, the extent to which youth are engaged has been one way in which Y-APs have been evaluated. I will now present and critique several popular ways in which Y-APs have been conceptualized.

**Existing Conceptualizations of Youth-Adult Partnerships**

Youth-adult partnerships have been conceptualized and evaluated within the literature in various ways. I will discuss four of these approaches. First and perhaps
most prominently, Y-APs have been conceptualized as existing along an adult-driven/youth-driven continuum. Second, Y-APs have been understood as partnerships in which youth and adults share goals and perspectives. Third, researchers have identified Y-APs as venues through which both youth and adults experience positive outcomes. Fourth, Y-APs have been viewed as having tangible outcomes, such as the completion of goals set out by the partnership. I will now discuss examples of these four characteristics within the literature, with particular focus to be given to the concept of Y-APs as existing along a youth vs. adult-driven continuum.

(1) Adult-driven/youth-driven continuum

In one example of the research based on conceptualization of Y-APs as being youth vs. adult-driven, Larson, Walker, and Pearce (2005) conducted a qualitative study in which they compared youth-programs that were driven primarily by either youth or adults. Adult-driven programs, they argued, provide youth with access to adult knowledge and skills and, as long as the adults promoted an atmosphere of fairness and opportunity, youth developed confidence, a sense of responsibility and interpersonal skills. In addition, adult-driven programs decreased the likelihood of youth becoming discouraged by failures, as adults could potentially intervene and prevent the failure from occurring if youth do not fulfill their roles. However, adult-driven programs potentially risked undermining youth “ownership” of the program in which the youth were involved. In contrast, as compared to adult-driven programs, youth-driven programs may have greater potential to empower youth and help them develop leadership skills. In youth-driven programs, youth reported increased motivation to achieve goals and felt that they were agents of their own development. However, as compared to adult-driven programs,
youth-driven programs tended to have a greater prevalence of conflict between adults and youth when youth did not fulfill their responsibilities (Camino, 2000). In addition, compared to adult-driven programs, youth in youth-driven programs tended to stray from the task at hand, thus delaying progress of group goals.

Along these same lines, Jones and Perkins (2004) developed the Continuum of Youth-Adult Relationships model, which presented five key categories of youth-adult relationships: Adult-Centered Leadership; Adult-Led Collaboration; Youth-Adult Partnership; Youth-Led Collaboration; and Youth-Centered Leadership. Again, the focus is on the extent to which adults and youth hold power within the partnership, with successful Y-APs being conceptualized as an ideal balance of power between youth and adults.

(2) **Shared goals and perspectives**

Researchers have emphasized the importance of shared goals and perspectives. For example, Camino (2000) outlined three key dimensions of Y-APs, one of which was shared principles and values, such as shared beliefs and equity. For Crosby and Bryson (2005), ideal Y-APs are characterized by mutual empowerment and shared vision, decision-making and responsibilities. Similarly, Zeldin and Petrokubi (2008) argued that the organizational culture of a Y-AP (i.e., shared partnership values) were an essential component of a successful Y-AP.

(3) **Positive outcomes**

In evaluating the impact of Y-APs on youth and adult outcomes, Zeldin and Petrokubi (2008) evaluated Y-APs based upon four positive outcomes, two of which bear particular relevance to youth and adult development: 1) impacts on youth development,
such as the development of youth efficacy; and 2) impacts on adult staff development, such as the achievement of generativity in the adult partners. Taking a different approach to connecting Y-APs to youth and adult outcomes, Kim et al. (1998) described five structural components of a Y-AP, of which three relate to adult and youth development, particularly focusing on skill development: 1) initial training of youth/adult leaders in core-skills areas; 2) training youth team members in core skill areas; and 3) providing specialized skills-training for the project to be launched by the youth team.

(4) **Tangible outcomes**

As an example of the conceptualization of Y-APs based upon the production of tangible, non-developmental outcome, Zeldin and Petrokubi (2008) included community outcomes, such as youth organization of public rallies and involvement with government parties, as an aspect of Y-AP success.

**Strengths and Weaknesses of Existing Conceptualizations of Y-APs**

Conceptualizing Y-APs as venues for development, the sharing of perspectives and goals, and the completion of tangible goals are useful in that they allow us to identify a partnership based upon its outcomes. However, a flaw of previous studies is that they have often confounded the characteristics of Y-APs with the outcomes of Y-APs. The current study looks at characteristics of Y-APs separately from the general outcomes (such as the examples listed under “positive outcomes” and “tangible outcomes” above) and has thus sought to eliminate this existing confound. I have acknowledged that the general outcomes of Y-APs are important, but they are not measured or manipulated in this study and are not considered characteristics of Y-APs.
Definition of a Successful Youth-Adult Partnership

I have defined a successful Y-AP as one in which “there is a mutuality in teaching and learning and where each age group sees itself as a resource for the other and offers what it uniquely can provide” (The National Commission on Resources for Youth, 1974, p. 227), reviewed and critiqued some of the existing conceptualizations of Y-APs, and have identified some key characteristics which separate Y-APs from other types of youth-adult relationships. I have sought to operationalize this definition and translate selected key characteristics of Y-APs into measurable variables. I will now present the three variables I have selected for this study: (1) perception of productivity; (2) positive affect; and (3) perception of having one’s contributions welcomed and considered, as well as the rationale for their inclusion. Table 1 includes a summary of these variables, in addition to a summary of the selected input variables. I will now provide further detail on these partnership characteristics and argue for their inclusion in a definition of Y-AP success.
Table 1

*Summary Chart of Manipulated Variables (IVs) and Measures (DV$s)*

<table>
<thead>
<tr>
<th>Variable/Measure</th>
<th>Conceptual Definition</th>
<th>Operationalization</th>
<th>Sample Item</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IV: Warmth</strong></td>
<td>A “positive, mild, volatile emotion involving physiological arousal and precipitated by experiencing directly or vicariously a love, family, or friendship relationship” (Aaker et al., 1986, p. 366).</td>
<td>See Appendix A Hypothetical Adult Partner Screen Directions”. Actress’ demeanor and choice of words.</td>
<td>Pilot Study: “How much encouragement would you expect from this person while working with them?”</td>
</tr>
<tr>
<td><strong>IV: Expertise</strong></td>
<td>The ability of the adult partner to provide relevant information to their youth counterpart (Sullivan &amp; Larson, 2010).</td>
<td>See Appendix A - “Hypothetical Adult Partner Screen Directions”. Whether or not the hypothetical adult’s work experience is relevant to the hypothetical task.</td>
<td>Pilot Study: “How much expertise do you think this person has that is relevant to the task at hand?”</td>
</tr>
<tr>
<td><strong>IV: Perceived Task Difficulty</strong></td>
<td>The perceived difficulty of a task a participant. Low-difficulty tasks are tasks that youth could likely complete easily without outside help, whereas high-difficulty tasks are tasks that youth would not be able to easily complete without outside help.</td>
<td>See Appendix B – “Hypothetical Task Scenarios”</td>
<td>Pilot Study: How much expertise do you think this person has that is relevant to the task at hand?</td>
</tr>
<tr>
<td><strong>DV: Perception of Productivity “Productivity”</strong></td>
<td>The extent to which the youth partner expects that the hypothetical partnership would make progress toward its goal.</td>
<td>See Appendix H – “Youth-Adult Partnership Success Measure” Partnership Productivity</td>
<td>Main Study: “I believe that our partnership would reach its goal”</td>
</tr>
</tbody>
</table>
(1) The perception of productivity ("Productivity")

First, while it is noted that shared goals are an important component of a Y-AP, it is important to recognize that the perception of progress may vary greatly between partners. Taking into account an individual’s perception of progress and, in particular, whether the partnership is an asset or a detriment to this progress, is important in determining whether a Y-AP can be considered successful. For example, to an outside observer, a partnership may accomplish its stated goal of organizing a fund-raising event. However, if members of the partnership do not perceive that they (or their partner) played a meaningful role in achieving their stated goal, then simply looking to see whether or not the fund-raising event took place would not be an effective measure of Y-AP success. It would simply be an indication that two people made a verbal commitment and at least one person did the necessary work to make it happen. Two people can interact and have positive experiences, but if they are not both working towards a mutual, identifiable goal, then they cannot, in my working model of partnership, be classified as a partnership.
Likewise, if those involved set goals but do not take steps towards achieving their goals, then youth are deprived of the opportunity to develop the skills and self-efficacy that may have come from working towards these goals. Last, although their contributions do not have to be equal – each partner may bring varying degrees of skill and expertise to the table – both partners must contribute to the progress that is being made and the progress must be bolstered from the inclusion of both partners. That is, neither partner should feel as though the task could be better accomplished alone.

(2) Positive Affect (“Affect”)

Second, as I shall subsequently discuss in greater detail, it is important to place additional focus on the role of positive affect in facilitating successful Y-APs. Without positive affect, a partnership may attain its goals and help both partners develop in positive ways but, as I will argue below, a partnership that is without positive affect will be less likely to provide youth with the developmental outcomes that are uniquely associated with involvement in Y-APs. Thus, I propose that a second measure of Y-AP success is positive affect felt between partners. While I am only measuring affect felt by youth, it is important to note that for mutual teaching and learning to exist, both partners must respect the other and feel respected in turn. If a partner displays derision, condescension, or other negative interactions, then it is unlikely that either partner will enjoy belonging to the partnership.

How much positive affect does a partnership require to be considered successful? Sullivan and Larson (2010) have suggested that only minimal levels are required for a partnership to succeed. The authors argue that partnerships need not be enduring or intimate to be functional; all that is required is that the partnership is amiable and that the
youth are cast in meaningful roles. There are likely many ways in which Y-APs can lead to positive affect, but I will focus on one explanation put forth by Lawler (2001) that applies particularly well to a partnership setting. Lawler (2001) proposed an “affect theory of social exchange”, in which a person comes to associate the positive feelings of repeated success with a partner or group (e.g., the adult partner) with whom the person collaborated to achieve that success, thus leading to affective attachment. Likewise, repeated failure will weaken the affective attachment toward the person with whom he/she had collaborated. Lawler suggested that the relationship between repeated success and affective attachment within these relationships is the extent to which the relationship is perceived as a “stable and controllable source of positive feelings” (Lawler, 2001, p. 343). In short, “people form stronger affective attachments to those social units that give them the greatest sense of control or self-efficacy” (Lawler, 2001, p. 354). Thus, if positive affect towards an adult partner is present within the context of a Y-AP, then presumably the partnership is providing the youth with opportunities to experience success, a sense of stability, and feelings of self-efficacy.

(3) Perception of having one’s contributions welcomed and considered “Contribution”

A third criticism I will make is that of the conceptualization of Y-APs as existing along an adult- vs. youth-driven continuum. This perspective is useful in that it acknowledges natural variations in the power balance within Y-APs, but thinking of any one partnership as being consistently adult or youth-driven is, perhaps, too rigid. In addition, simply acknowledging the variation of power balance within a partnership provides no mechanism for explaining how this balance might develop across time. I will argue below that, rather than focusing on the degree to which any one member of a
partnership holds power, it is important to determine the degree to which both members are cast in meaningful roles and have real influence over the progress and outcomes of the partnership as a whole.

In particular, there are at least two factors that need to be considered when determining the extent to which a partner’s contributions are influencing the successful progress of a youth-adult partnership. The first factor is the relative skills and expertise of any given partner, which will influence how difficult each individual partner perceives the task. The second factor is the expectations and roles that accompany the title of “youth” or “adult”, including issues pertaining to the classification of any person as a youth or an adult. These two factors shall be discussed in the method section. Thus, I will argue that the third measure of partnership success may be the extent to which youth are in meaningful roles. A partnership may attain its goals and there may be mutual positive affect, but if the contributions of youth are not welcomed and considered by their partners, then their input is merely symbolic and they may fail to develop some of the skills that can be acquired from participating in Y-APs. Youth may be aware of this tokenism and become skeptical of adult motives (Zeldin, 2004); such skepticism may serve to disempower youth further (Wong, Zimmerman, & Parker, 2010).

To summarize, for the purpose of this study, a Y-AP will be considered successful if demonstrates the following characteristics: (1) youth’s perception of productivity; (2) youth’s positive affect toward their adult partner; and (3) youth’s belief that their views are welcomed and considered.

**Input Variables**

There are, arguably, many factors that may influence the proposed Y-AP success
components. I will discuss two, which I will argue are of particular importance:

(1) warmth and expertise as individual characteristics of the adult partner; and (2) youth perception of task difficulty.

(1) Warmth

There has been substantial evidence that the quality of youth-adult interactions is a critical component of Y-AP success (Jekielek, Moore, Hair, & Scarupa, 2002; Jones & Perkins, 2005; Rhodes, 2002). Warmth is one measure of relationship quality and has been defined as a “positive, mild, volatile emotion involving physiological arousal and precipitated by experiencing directly or vicariously a love, family, or friendship relationship” (Aaker et al., 1986, p. 366).

Researchers have conceptualized warmth as being related to qualities such as social closeness, trust, friendliness and likability (Markey & Markey, 2006). Demonstrations of warmth include behaviors such as “the degree of smiling, laughing, positive voice of tone, and verbal and physical affection” (Eisenberg et al., 2005, p. 7). Within the mentoring literature, warmth, along with flexibility and openness, have been cited as important characteristics of a good mentor (Taylor & Bressler, 2001) and adult warmth in after-school programs has been shown to have a positive impact on youth outcomes (Rhodes, 2004). Similarly, evidence within the parenting literature has suggested that demonstrations of parental warmth are associated with youth competence (Roberts & Strayer, 1987). Unsurprisingly, in a recent qualitative study, Sullivan and Larson (2010) posited that adults who are friendly, respectful and encouraging are ideal for interacting with youth. These qualities in adults can be summed as adult “warmth”
and are predicted to have a positive effect on the quality of interactions between adults and youth.

(2) Expertise

Sullivan and Larson (2010) discussed the concept of “high-resource adults”, who are able to provide youth with “information, socialization, and access to the adult worlds they eventually need to join” (p. 100). The authors posit that interaction with these high-resource adults may provide youth with unique opportunities to develop skills and competencies. It is beyond the scope of the current study to explore the “socialization” and “access to adult worlds” components of resource. For the purpose of the current study, I will focus only on the ability of the adult partner to provide relevant information to their youth counterpart, which will be conceptualized as “adult expertise”.

Thus, in attempting to discern how adult qualities affect the success of Y-APs, I will focus on the role of adult expertise and warmth. It is important to note, however, that the ability of an adult to provide youth with relevant information is only beneficial if the youth does not already possess this information. While it may be easy to think of adults as providing resources for the partnership and youth as receiving them, it is important to remember that both partners may have much to contribute and learn (i.e., mutuality of teaching and learning). In addition, even when adults have much to offer youth in information and assistance, it is important to remember that, depending on the task at hand, youth may vary in the extent to which they desire their partnership to be adult or youth driven.

(3) Youth Perception of Task Difficulty

Like members of any group, youth will vary in terms of their personalities,
capabilities and preferences. It is important to take these variations into consideration when discussing the factors that may influence youth task-oriented involvement in Y-APs. Due to differential experiences and skill sets, some youth within a Y-AP might find the task they are working on to be difficult and daunting, while other youth may find the same task easy and enjoyable. Larson, Walker and Pearce (2005), for example, argued that older youth may be prepared better for a youth-driven approach to Y-APs than are younger or less experienced youth, who might stand to benefit more, at least initially, from an adult-driven approach. These authors concluded that the degree to which the partnership is youth or adult-driven should be determined by the individual capacities of youth. Following their line of reasoning, it also can be argued that youth might be more proficient in some areas than others. As such, one must consider youth capabilities with regard to the specific task at hand when determining the relative extent of adult contribution.

Youth preferences for adult input may vary as a function of how difficult they perceive a task to be. When faced with any task, youth may have differential developmental capacities, depending on their level of experience and their personal characteristics. The youth who is confident and takes initiative when faced with a familiar task may prefer to yield to an adult partner when faced with a difficult task or an esoteric field with which the youth has little experience. Therefore, as youth’s perception of task difficulty may vary, so too will the relative importance that youth place on adult expertise and warmth.

When youth perceive a task as difficult, they may rely more heavily on the expertise of the adult than when they perceive a task as being easy. In addition, because
of the increased reliance on adult contribution during difficult tasks, youth may be more 
willng to overlook an adult’s lack of warmth. In contrast, if the task is easy youth may be 
less reliant on their partner’s expertise when completing the task, but may be less tolerant 
if the adult lacks warmth. In other words, the less reliant that youth are on adult 
contribution, the more youth may expect adults to compensate for their lack of 
contribution through behaving warmly and facilitating friendly co-operation and positive 
affect. An alternate interpretation may be that when the task is easy, youth may be more 
inclined to adopt a leadership role within the partnership and, thus, will be less reliant on 
the contributions of their adult partner.

Having provided a working definition of Y-AP success and describing the input 
variables that I hypothesize to be related to this success, I will now discuss how these 
concepts and variables were tested in the present study.

The Present Study

Overall, this study had two primary goals. First, I wished to assess how perceived 
adult expertise and warmth might influence youth expectations of Y-AP success, as 
measured by (1) youth perception of productivity, (2) youth expectations of positive 
affect towards their adult partner, and (3) youth belief that their views would be 
welcomed and considered. Second, I wished to determine whether youth perceive that 
they would respond differentially to adults based upon the level of task difficulty.

To help accomplish these goals, I first ran a pilot test to evaluate the created 
materials and measures to be used in the study (see section below on pilot testing for 
additional details). My main study was also conducted online, but this time participants 
were only exposed to one of the four video clips of the hypothetical adult and every
participant read descriptions of the same pair of hypothetical tasks. Participants were randomly assigned to adult conditions and were asked to watch the video clip, read the first hypothetical task of the pair and then respond to the variables created to measure Y-AP success (Productivity, Affect and Contribution) while imagining that they would be working with this adult as a partner. After they completed the measures, they were asked to re-watch the video clip (to keep the characteristics of the adult partner salient), then read the second hypothetical task of the pair, which varied in difficulty from the first task, while still imagining that they would be working with this adult as a partner. They were then asked to complete the Y-AP success measures a second time. Thus, each participant watched the same video twice, and completed the same set of measures in response to two similar tasks which varied in difficulty.

I have provided a summary of my current study. I will now specifically address the hypotheses of this study and provide a detailed overview of the methodology that was used.

**Hypotheses**

Using my proposed model (Fig. 1) as a guide, I had three hypotheses:

1. Across warmth and task conditions, there would be a main effect for expertise in which higher adult expertise would predict higher scores in all three Y-AP success measures.

2. Across expertise and task conditions, there would be a main effect of warmth in which higher adult warmth would predict higher scores in all three Y-AP success measures.
3. The effects of expertise and warmth would vary as a function of task difficulty, in which adult expertise would better predict higher Y-AP success scores in High-Difficulty Task conditions and adult warmth would predict higher Y-AP success scores in Low-Difficulty Task conditions.
Method – Pilot Tests

Goals of the Pilot Study:

In testing the hypotheses of my study, I needed to find a method of manipulating the input variables that I had selected. Ultimately, I chose to have an actress depict different levels of warmth and expertise and to provide participants with hypothetical tasks which varied in difficulty. A key concern was whether I could be certain that my manipulations were truly effective, because if they were not (i.e., if the different levels of manipulation were not measurably different from each other), then they could not be used with confidence in my main study. Thus, the goals of the pilot study were to ensure that the manipulated variables produced measurably different outcomes. To achieve the goals of this pilot study, four video clips and ten pairs of tasks were created. The goal in the creation of these videos was to depict four hypothetical adults who displayed all four possible combinations of warmth and expertise. The goal in the creation of the tasks was to create tasks that were similar in content, but varied in difficulty.

I hired an actress and created a very specific script and screen directions (See Appendix A) that were designed to depict the four possible combinations of adult warmth and adult expertise (High Warmth/Low Expertise, High Warmth/High Expertise, Low Warmth/Low Expertise, Low Warmth/High Expertise) and produced four short (approximately 30 seconds in length) video clips. I also created 10 paired tasks that were similar in content but varied in difficulty. I then created an online pilot study, in which participants viewed all four video clips and read all 10 pairs of hypothetical tasks and then responded to items designed to rate the adults’ warmth and expertise and the difficulty of the hypothetical tasks. My goal was to ensure that the video clips depicted
levels of expertise and warmth that varied to a statistically significant degree. Likewise, I ran tests to ensure that the hypothetical tasks varied in difficulty to a statistically significant degree. After having completed the pilot testing, satisfied that my manipulations produced enough of a difference to serve as independent variables in my experimental design, I used the same four video clips and selected the best pair of hypothetical tasks to be used in my main study. To summarize, the goals of the pilot study were as follows:

1. To determine whether the two levels (high, low) of warmth and expertise portrayed in the video clips were rated as being statistically different from each other; and
2. To determine whether a pair of tasks, that were similar on many levels, were rated as being statistically different in how difficult they were.

**Participants**

Thirty-five participants (8 men) were recruited from amongst Brock University graduate students and through an advertisement on Facebook.com. Ages ranged from 19 to 49 years ($M = 27.5$, $SD = 7.22$).

**Materials and Measures**

*Video Development and Content – Portrayal of Warmth and Expertise*

An actress, fifty years of age, was recruited to depict four adults who varied in warmth and expertise (See Appendix A for her screen directions). The content of her script was designed to reflect either high-expertise or low-expertise and the manner in which she delivered her lines reflected either high-warmth or low-warmth. In both the low-expertise and high-expertise condition, the hypothetical adult described prior work
experiences that required similar levels of education and did not differ in the amount of “prestige” associated with their employment (i.e. years of required education, income associated with the position). Rather, for the purpose of this study, the hypothetical adult exhibited “high expertise” when the description of her work experience corresponded with the hypothetical collaborative task and “low expertise” when the description of her work experience was not relevant to the task at hand. Video clips were approximately 30 seconds in length and the actress was recorded in the same neutral environment (i.e., blank wall behind her, nothing else in the frame from which the viewer could make inferences about her warmth or expertise). The warmth and expertise depicted in the video clips were measured using the scale found in Appendix C.

Hypothetical Task Development

A variety of task-pairs (e.g., volunteering to work with familiar animals such as puppies, vs. unfamiliar animals such as rhesus monkeys, holding an informational session in a familiar location vs. an unfamiliar location where a majority of people do not speak in the participants’ native language) were tested to optimize the chances of finding a pair of tasks that satisfied the goals of the pilot study. Three criteria were established to ensure that all suggested tasks met the minimum requirements needed to be suitable for the pilot study. To be considered as a variable in the pilot study, the hypothetical task pairs had to have fulfilled following criteria:

1. The task must produce some tangible end product. This criterion helps eliminates ambiguity with regards to what a participant might consider “completion” of a task;
2. The task must allow for collaboration. Any task that restricts the contribution of a second person was not suitable for our pilot test;

3. The task must be interesting and/or relevant to the age group I am studying (i.e., 17 – 25 years of age); and

4. The “easy” version of the task must be something with which the average North American 17-25 year-old university student would likely have some expertise, experience or knowledge.

Participants were presented with ten paired sets of tasks (one low difficulty, one high difficulty) (See Appendix B for the set of tasks that were ultimately selected). Perceived task difficulty was measured using the scale found in Appendix D.

**Procedure**

Prior to any data collection, clearance was obtained from the Research Ethics Board (REB) at Brock University (Copy of REB Clearance in Appendix E). Participants accessed the website www.surveymonkey.com on which the survey was hosted, read the consent materials (See Appendix F), and then proceeded to the survey. Participants were prompted to provide basic demographic information (i.e., age and gender) and were then given a brief hypothetical task (equivalent to the high-difficulty task which was eventually chosen to be used in the main study). They then were told to imagine that they were meeting the actress for the first time and that the actress would be their partner in completing the hypothetical task.

Participants were then prompted to watch a video clip depicting one of the four adult conditions: (1) High warmth/High expertise; (2) Low warmth/High Expertise; (3) High warmth/Low expertise; and (4) Low warmth/Low expertise. After watching one of
the videos, the participant was asked to rate the adult’s warmth and expertise within the context of the hypothesized partnership (See Appendix C). Following the first video, participants were asked to evaluate the difficulty of five tasks, with the instruction for participants to assume they were to complete the task without any assistance (See Appendix D). After five tasks were evaluated, the participant was presented with another video of a different adult condition, followed by a repeat of the previous warmth and expertise measures. Again, the adult video was followed by five sets of hypothetical tasks. In total, this process (i.e., rating a video, followed by rating 5 sets of tasks) was repeated a total of four times, at which point participants had been exposed to all four adult conditions and all twenty tasks.

Results – Pilot Study

Scale properties

To assess the reliability of the measures that were created, Cronbach’s alpha was calculated for the items in the warmth and expertise measures, respectively. The reliability scores were 0.72 for the warmth measure and 0.87 for the expertise measure, respectively.

Paired samples t-test – Video portrayal of Warmth and Expertise

Individual variables from each of the four conditions were summed to create high-warmth composite scores and low-warmth composite scores (i.e., warmth items from “high warmth, high expertise” were combined with warmth items from “high warmth, low expertise” to form a “high warmth” composite), as well as high-expertise and low-expertise composite scores.
There was a significant difference between high warmth ($M = 30.37, SD = 5.29$) and low warmth scores ($M = 20.17, SD = 6.26$) conditions; ($t(34) = 9.07, p. < 0.01$), and also between high expertise ($M = 31.97, SD = 4.61$) and low expertise scores ($M = 24.45, SD = 6.99$) conditions; ($t(32) = 4.79, p. < 0.01$).

**Paired samples t-test – Task Difficulty**

Of all the pairs of tasks, one pair (found in Appendix B) both fulfilled all of the necessary criteria and demonstrated a significant difference in the difficulty ratings for the low difficulty ($M = 10.8, SD = 2.8$) and high difficulty ($M = 13.0, SD = 3.4$) task conditions; ($t(34) = -4.08, p. < 0.01$).

**Discussion**

The pilot-testing confirmed that the videos effectively portrayed high and low levels of both warmth and expertise and that these levels were significantly different from each other (i.e., high warmth was rated as being significantly different from low warmth). In addition, a pair of tasks was identified that fulfilled all of the aforementioned task criteria and were also rated as being significantly different in their difficulty level. Thus, with evidence that the manipulations produced statistically different outcomes, the video clips and tasks identified during the pilot testing were chosen to be used in the main study.
Method – Main Study

Participants

The study was completed by 402 participants (358 women) between the ages of 17 and 25 years ($M = 19.27, SD = 1.28$) enrolled in two Canadian Universities, Brock University ($N = 376$) and Cape Breton University ($N = 26$). Although the definition of “youth” has varied considerably across studies, for the purposes of the thesis, I limited the age range of my participants to between 17 and 25 years of age. The actress chosen to depict different adults was in her 50s. Including participants who were older than 25 years of age would have reduced the relative difference between the youth and adult status, which was a differentiation that was essential to the study.

The largest proportion of students identified their majors as Psychology (26%), and Child and Youth Studies (23%), followed by Concurrent Education (11%). Most were in their second (45%) or first (35%) year of study and participants were largely Caucasian (88%). A majority were originally from (82%) Ontario. See Table 2 for further demographic details.

1 The original sample size was 467; however, 55 of these participants dropped out immediately after completing the consent form and an additional 10 were excluded for various other reasons (see “Preliminary Analyses”). Although identifying information was not provided, these participants were still awarded a form of credit for their research participation (i.e., class research credit or entry into a draw for $50.00). Researchers conducting online studies typically can expect a 10% attrition rate immediately, or shortly after, completing a minimal number of questions to receive credit. However, such participants have not been found to systematically differ from the remainder of the sample and thus can be removed from the analysis without bias (Hoerger, 2010).
Table 2

*Participant Demographics*

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$N = 402$

*Note: Total numbers may not equal 402 due to lack of responses by some participants.*

**Materials and Measures**

**Materials**

**Video Clips**

Four video clips were selected during the pilot-testing procedure on the basis of their ratings for depictions of Adult-Expertise and Adult-Warmth (See Appendix A for screen directions). Each clip depicted a different combination of expertise and warmth: 1) High-warmth, High-expertise; 2) High-warmth, Low-expertise; 3) Low-warmth, High-Expertise; and 4) Low-warmth, Low-Expertise. Warmth was depicted through a choice use of phrases (e.g., High warmth: “I’m looking forward to working with you” vs. Low warmth “I’m looking forward to working on this task) and also through facial expression and tone of voice. Expertise was depicted through congruence between the hypothetical adult’s work experience and the current task at hand, with the actress in the high-expertise clips describing work that is strongly related to the partnership’s task and the actress in the low-expertise clips describing work that is not strongly related to the partnership’s task.
Task Difficulty

A pair of hypothetical tasks was selected on the basis of the pilot test results and was presented to participants in a counter-balanced design (See Appendix B). These tasks required participants to create informational booklets for new university students. In the low-difficulty task, the target audience for the informational booklets was simply identified as first-year university students. In the high-difficulty task, the target audience for the informational booklets was identified further as new university students with disabilities. See “Participant Expertise” section below for additional information.

Measures

Scale properties

To assess the reliability of the created measures, Cronbach’s alpha was calculated for the overall Y-AP Success Measure (15 items) and also for the three sub-categories (5 items per category) which comprised the Y-AP success measure. Refer to the Appendix H for a copy of the measure.

Perception of Productivity within the Partnership - “Productivity”

The productivity measure comprised five items, designed to assess the extent to which participants expected that that established goals would be achieved within the context of the partnership (e.g., If one partner did all of the work, the Productivity score would be low even if the goal was achieved). Items were scored on a 5-point Likert-type scale, ranging from 1 “Strongly Disagree” to 5 “Strongly Agree”. Sample items included “I believe that our partnership would reach its goal” and “I believe that our partnership would produce high-quality work”. The Cronbach’s alpha for the overall productivity measure was 0.86, with all correlations in the expected directions (See Table 3).
Table 3

**Correlations Among Y-AP Success Measures**

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<th>Prod Easy</th>
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<th>Affect Hard</th>
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</table>

**p. < 0.01

**Expectation of Positive Affect toward Hypothetical Adult – “Affect”**

The Affect measure comprised five items, designed to assess the extent to which participants expected that they would feel positive affect while working with their hypothetical adult partner (e.g., *Would the time spent around their partner be enjoyable*). Items were scored on a 5-point Likert-type scale, ranging from 1 “Strongly Disagree” to 5 “Strongly Agree”. Sample items included “I would enjoy the time spent working on a task with this person” and “I don’t think I would like this person very much” (reverse coded). The Cronbach’s alpha for the overall Affect measure was 0.64, with all correlations in the expected directions (See Table 3).
Expectation that Contributions would be Considered and Welcomed – “Contribution”

The Contribution measure comprised five items, designed to assess the extent to which participants expected that their hypothetical adult partner would actively seek and encourage participation and contribution from them (e.g., “Would their adult partner take their contributions seriously and take steps to seek input from their youth partner”). Items were scored on a 5-point Likert-type scale, ranging from 1 “Strongly Disagree” to 5 “Strongly Agree”. Sample items included “I would feel that my views and knowledge would be listened to by this person” and “I feel that this person would not really value my contribution” (reverse coded). The Cronbach’s alpha for the overall contribution measure was 0.85, with all correlations in the expected directions (See Table 3).

Composite Measure of Y-AP Partnership Success

The composite measure was comprised of fifteen items, the composite of the three partnership success measures (“Productivity”, “Affect” and “Contribution”) and was designed to assess the overall success of the Y-AP based on the previously described model. The Cronbach’s alpha for the overall Y-AP success measure was 0.88, with all correlations in the expected directions (See Table 3).

Design and Procedure

Prior to any data collection, clearance was obtained from the Research Ethics Board at Brock University (see Clearance in Appendix I). Youth participants accessed the website (www.surveymonkey.com) on which the survey was hosted, read the consent materials, and proceeded onward to the survey. After completing the demographics section, the participant was then randomly assigned to one of four conditions, which varied in adult warmth and expertise. There were two warmth (high and low) and two
expertise (high and low) levels, yielding four possible hypothetical adult partners: (1) High expertise/High warmth; (2) High expertise/Low warmth; (3) Low expertise/High warmth; or (4) Low expertise/Low warmth. Each participant then watched a video of the actress depicting an adult partner, with warmth and expertise determined by the condition. The same actress portrayed each of the four conditions.

Participants in all four conditions were presented with written descriptions of two tasks of varying difficulty (See Appendix B), which were to be performed with the adult partner depicted in the video. After reading the first task, participants were asked to respond to questions from the Y-AP success measure (See Appendix H). Participants then read a description of the second task and asked to complete the Y-AP success measure again, based on the second task.

Each video contained the following elements: 1) An opening statement describing the context of a partnership (see below) and explaining that a partner has been assigned to work with them; 2) A 30-second video of the adult partner, speaking to the participant as though they were meeting for the first time (See Appendix A for screen directions); 3) Presentation of a description of the first task (low difficulty condition: They were asked to imagine creating an informational pamphlet for first-year university students, designed to help them adjust to university life); 4) At this point, participants were asked to complete the “Youth-Adult Partnership Success Measure” (See Appendix H) with regard to their adult partner and the first task, which they had just previously read; 5) Participants re-watched the video to refresh their memory and were presented with the second task (high difficulty: They were asked to imagine creating an informational pamphlet for first-year university students who have been diagnosed with disabilities,
designed to help them adjust to university life and to link them with resources in the area that are relevant to the academic success of students with disabilities); and 6) The participant was again asked to complete the “Youth-Adult Partnership Success Measure”, this time with consideration given to the adult partner and the second task, which they had just read. It should be noted that the two levels of task difficulty were counterbalanced across the four adult conditions, with half of the participants presented with the high-difficulty task first, following by the low difficulty task, and the other half were presented with the tasks in the opposite order.
Results - Main Study

Preliminary Analyses – Data Screening

Fifty-five participants who did not submit any data (i.e., discontinued the study after completing the consent form to obtain credit) were identified and were not included in the study. Nine participants who provided responses on only one of the difficulty conditions (i.e., only low task difficulty measures were responded to) were removed from the analysis. One additional participant was excluded because her/his age exceeded the upper limit (28 years). In total, 65 participants were removed from subsequent analyses.

Main Analysis – Overall Statistical Issues

Homogeneity of Variance

One of the main statistical issues with this study was the violation of the assumption of homogeneity of covariance among the task-difficulty (within subject) scores. For the “Productivity” and “Affect” analyses, Box’s M was found to be significant. To compensate, the Greenhouse-Geisser adjustment was used in reporting all relevant results. In addition, Levene’s test of equality of variances was conducted a total of eight times (two for each analysis). Levene’s test for between-subjects effects was significant in the “Productivity” analysis, when comparing variances in the high-difficulty task condition. To compensate for this, Tukey’s HSD was used to test all post-hoc analyses.

Reliability

A secondary statistical issue in this study was the issue of scale reliability. In this study, I attempted an experimental design in an area of research that typically relies on
qualitative analysis, so scale development was a great concern. While a majority of the scales had good Cronbach’s alpha scores, the “Affect” scale produced a modest Cronbach’s alpha of 0.64, which is just below what is typically considered as desirable in the literature.

Main Analysis – Mixed-Model ANOVAs with Within-Subjects Design

To test the three hypotheses of this study, I conducted four mixed-model ANOVAs to assess the impact of warmth, expertise and task difficulty on the Y-AP Success measure, and also separately on the three components of Y-AP success (e.g., Productivity, Affect, Contributions), as well as on a composite measure of all three. In all four ANOVAs, there were 2 between-subject factors, warmth (with two levels, high and low) and expertise (with two levels, high and low) as well as one within-subjects factor, task difficulty (also with two levels, high and low). Post-hoc analyses on significant interactions were conducted using Tukey’s HSD statistic. In assessing the results of the analyses, the overall results of each ANOVA are summarized and then organized as they relate to the original hypotheses of the study (See Table 4 for a summary of initial results and Table 5 for the results of post-hoc analyses).
Table 4

*Main Effects and Interactions of Adult Variables and Task Difficulty on Y-AP Success*

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<th>p</th>
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| Affect               |     |    |         |                  |
|----------------------|     |    |         |                  |
| **Between Subjects** |     |    |         |                  |
| Warmth               | 9.29| 1,398 | <0.01 <0.01 |                  |
| Expertise            | 8.72| 1,398 | <0.01 <0.01 |                  |
| Warmth*Expertise     | 7.36| 1,398 | <0.01 <0.01 |                  |
| **Within Subjects**  |     |    |         |                  |
| Task Difficulty      | 0.21| 1,398 | 0.64 <0.01 |                  |
| Task Difficulty*Warmth| 0.56| 1,398 | 0.45 <0.01 |                  |
| Task Difficulty*Expertise| 0.14| 1,398 | 0.70 <0.01 |                  |
| Task Difficulty*Warmth*Expertise| 0.06| 1,398 | 0.80 <0.01 |                  |
### Contribution

**Between Subjects**

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**Within Subjects**

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*Significant differences appear in bold font.

### Table 5

**Post-hoc Analysis of Significant Interactions.**

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*Significant q values 2.77 (p. = 0.05), with a DF error of 398.
ANOVA 1: Overall Y-AP Success

Box’s M was found to be non-significant (Box’s M = 13.46, F(9, 1715890) = 1.48, p. = 0.15), indicating that homogeneity of covariances could be assumed. Levene’s test of Equality of Error Variances was non-significant for both the High-difficulty Condition of productivity (F(3.398) = .573, p. = 0.63) and for the Low-difficulty Condition of productivity (F(3.398) = 1.76, p. = 0.115) indicating that homogeneity of variances could be assumed. Relevant means can be located in Table 6.

Table 6

Table of Means and Standard Deviations for Y-AP Success Outcome Scores

<table>
<thead>
<tr>
<th>Measure</th>
<th>Warmth Condition</th>
<th>Expertise Condition</th>
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Scale scores ranged from 1 to 5, n = 402

Between-Subject Effects

A significant interaction between Adult Warmth and Adult Expertise was found, with post-hoc analyses indicating that participants who were exposed to hypothetical adults low in both warmth and expertise produced significantly lower Y-AP success
scores than participants exposed to any other levels of hypothetical adult warmth and expertise, which did not produce scores that differed significantly from each other. Analyses also revealed a statistically significant main effect for Adult Expertise, which was qualified by its higher-order interaction with warmth. Thus, the main effect was not interpretable and will only be discussed in relation to its highest order interaction. Relevant means can be found in Table 6.

Within-Subject Effects

A significant main effect was found for task difficulty, in which participants produced higher overall success scores in the low-difficulty tasks as compared to the high-difficulty tasks. Relevant means can be found in Table 6.

ANOVA 2: Perception of Productivity

Box’s M was found to be significant (Box’s $M = 31.67$, $F(9, 1715890.09) = 3.49$, $p < .001$), indicating that the assumption of homogeneity of covariances had been violated. To compensate for this finding, the Greenhouse-Geisser adjustment was used. Levene’s test of Equality of Error Variances was significant for the High-difficulty Condition of Productivity ($F(3.398) = 4.94$, $p < .01$) but non-significant for the Low-difficulty Condition of productivity ($F(3.398) = 0.22$, $p = 0.89$), indicating that homogeneity of variances could not be assumed. Relevant means are located in Table 6.

Between-Subject Effects

A significant main-effect for Adult Expertise was found, in which participants produced significantly higher productivity scores when exposed to hypothetical adults who demonstrated high expertise. Relevant means can be found in Table 6.
Within-Subject Effects

A significant interaction between Task Difficulty and Adult Warmth was also found (See Figure 2). Post-hoc tests indicated that across low-difficulty task conditions, adult warmth did not have a significant effect on productivity scores. However, across hypothetical low-warmth adult conditions, participants produced significantly higher productivity scores when the task was low in difficulty. Surprisingly, across high-difficulty tasks, participants produced significantly higher productivity scores when the hypothetical adult demonstrated low-warmth. In addition, a significant main effect was found for task difficulty. However, as this result is qualified by the interaction between task difficult and warmth, the results will only be discussed in relation to the highest order interaction. Relevant means can be found in Table 6.

Figure 2. Significant Productivity Interaction: Warmth by Difficulty.
These findings were consistent with the hypothesis that there would be a main effect for expertise across all conditions, with participants from the High-Expertise condition producing higher productivity scores than participants from the Low-Expertise condition. However, the hypothesis that warmth would produce a main effect across all conditions was not supported, as no significant main-effect of warmth was found. However, a significant Warmth by Task Difficulty interaction emerged, in High-Difficulty task conditions, with participants in the high-difficulty task condition producing higher mean productivity scores when they were assigned to the low-warmth adult condition, as compared with participants assigned to the high-warmth adult condition.

ANOVA 3: Positive Affect

Box’s M was found to be significant (Box’s $M = 31.47$, $F(9, 1715890.09) = 3.46, p < .001$), indicating that the assumption of homogeneity of covariances had been violated. To compensate for this finding, the Greenhouse-Geisser adjustment was used. Levene’s test of Equality of Error Variances was non-significant for both the High-difficulty Condition of productivity ($F(3.398) = 2.47, p = 0.06$) and the Low-difficulty Condition of productivity ($F(3.398) = 2.33, p = 0.07$), indicating that homogeneity of variances could be assumed. Relevant means can be located in Table 6.

Between-Subject Effects

A significant interaction between Adult Warmth and Expertise was found (See Figure 3). Post-hoc tests indicated that participants who were exposed to hypothetical adults who were low in both warmth and expertise produced significantly lower affect
scores than participants exposed to any other levels of hypothetical adult warmth and expertise, which did not produce scores that differed significantly from each other.

In addition, there was a statistically significant main effect for both Adult Warmth and Adult Expertise. However, as these main effects were both qualified by the higher-order interaction term of warmth by expertise, the results will only be discussed in relation to the highest order interaction. Relevant means can be found in Table 6.

*Within-Subject Effects*

There were no statistically significant within-subject effects.

*Figure 3. Significant Affect Interaction: Warmth by Expertise.*

Once more, the findings from the third ANOVA were also consistent with the hypothesis that expertise would produce a main effect across all conditions, with participants from the High-Expertise condition producing higher “affect” scores than participants from the Low-Expertise condition. The analysis of positive affect supported the hypothesis that warmth would produce a main effect across all conditions, with a significant main effect found for Adult-Warmth. Post-hoc analyses indicated that
participants in the High-Warmth condition reported significantly higher Affect scores as compared to participants in the Low-Warmth condition. Similar to the result of the analysis of Y-AP success scores, task difficulty did not significantly interact with any other variables. These findings do not support the hypothesis that the effects of expertise and warmth would vary as a function of task difficulty, in which high adult expertise would predict higher Y-AP success scores in High-Difficulty Task conditions and high adult warmth would predict higher Y-AP success scores in Low-Difficulty Task conditions.

ANOVA 4: Perception of having one’s Contributions Considered and Welcomed

Box’s M was found to be non-significant (Box’s $M = 10.36, F(9, 1715890.09) = 1.14, p = .0.33$), indicating that the assumption of homogeneity of covariances had not been violated. Levene’s test of Equality of Error Variances was found to be non-significant for both the Low-difficulty ($F(3, 398) = 2.00, p = 0.11$) and High-difficulty ($F(3, 398) = 1.21, p = 0.30$). Relevant means can be found in Table 6.

Between-Subject Effects

There was a statistically significant main effect for Adult Expertise. However, as this main effect was qualified by the higher-order interaction term of Adult Expertise and Task Difficulty (see below), the results will only be discussed in relation to the highest order interaction. Relevant means can be found in Table 6.

Within-Subject Effects

A significant interaction was found between Task Difficulty and Adult Expertise (See Figure 4). Post-hoc tests indicated that participants faced with low-difficulty tasks that were also exposed to high-expertise hypothetical adults produced perceived
contribution scores that were significantly higher than participants exposed to any other combination of hypothetical adult expertise and task difficulty levels, all of which did not produce scores that differed significantly from each other. Relevant means can be found in Table 6.

**Figure 4.** Significant Contribution Interaction: Difficulty by Expertise.

In contrast to the first three analyses, the results from the ANOVA of perceived contribution scores were not entirely consistent with the hypothesis that expertise would produce a main effect across all conditions, with no main effect found for Adult Expertise.

**Summary of Results**

**Overall Y-AP Success**

When the three Y-AP success components were aggregated into the composite Y-
AP success measure, I found a significant Expertise by Warmth interaction, in which participants in the Low-Warmth/Low-Expertise condition produced significantly scores than participants in any other condition. In addition, two main effects were found: Expertise (qualified by the Warmth*Expertise interaction) and Task Difficulty.

**Productivity**

A significant warmth by difficulty interaction was found, in which participants in low-warmth conditions produced significantly higher perceived productivity scores when the task was high in difficulty. In addition, scores varied as a function of difficulty for those in the high warmth condition. Two main effects were found, Expertise and Task-difficulty, although the latter was qualified by the Difficulty by Warmth Interaction.

**Positive Affect**

A significant warmth by expertise interaction was found, in which participants from the Low-Warmth/Low-Expertise condition produced significantly lower perceived Positive Affect scores than any other condition. Two main effects were found, Expertise and Warmth, although both were qualified by the Difficulty by Warmth Interaction.

**Contribution**

A significant interaction was found between Expertise and Task Difficulty, in which participants in the High-Expertise condition produced significantly higher perceived Contribution scores on the low-difficulty task condition than participants from any other combination of conditions, with the exception of participants in the High-Expertise/High-Difficulty condition, from which they did not significantly differ. In addition, a main effect was found for Expertise, although it was qualified by the interaction.
Discussion

Discussion Overview

My intent in this study was to approach youth-adult partnerships using a different method than that which has characteristically defined the current literature. I explored these partnerships using an experimental design and systematically manipulated elements that have been found to be associated with positive youth-adult partnerships. Further, I sought to explore characteristics of Y-APs without confounding these characteristics with general outcomes. I created a scale to evaluate the extent to which my chosen variables – adult warmth, adult expertise, and task difficulty – promoted outcome variables that researchers have identified as positive. These three components of Y-AP success, perceptions of partnership productivity, positive affect, and the belief that one’s contributions would be welcomed and considered, were chosen on the basis that they would likely foster the development of youth engagement. Youth engagement, in turn, has been associated with positive youth development.

Using an experimental design, I aimed to tease out some of the ambiguity associated with correlational studies. Although I understood that any results I found would be, perhaps, narrower in scope than a qualitative or correlational study, I decided that the existing body of literature would be best moved forward with a more systematic approach to understanding the potential impact that adult partners may have and how this impact may be mitigated by the perceived difficulty of the task. Thus, the aim was to shed light on some existing questions but, more importantly, to provide evidence that might guide the next steps for researchers to take in understanding the mechanisms by which characteristics of successful youth-adult partnerships may lead to beneficial
outcomes. I sought not only to measure partnership success, in a conceptually relevant manner, but to develop a better understanding of the mechanisms underlying the success of youth-adult partnerships.

Using the newly developed Y-AP success model as a starting point, I formed three major hypotheses, which were tested using three mixed-model ANOVAs with within-subject measures. First, I tested the prediction that across warmth and task conditions, there would be a main effect for expertise in which higher adult expertise would predict higher scores in all three Y-AP success components. Second, I tested the prediction that across expertise and task conditions, there would be a main effect of warmth in which higher adult warmth would predict high scores in all three Y-AP success components. Third, I tested the prediction that the effects of expertise and warmth would vary as a function of task difficulty, in which adult expertise would predict higher Y-AP success scores in High-Difficulty Task conditions and adult warmth would predict higher Y-AP success scores in Low-Difficulty Task conditions.

The results indicated that warmth, expertise and difficulty all produced significant differences in one or more of the chosen indicators of Y-AP success – perceptions of productivity, positive affect, and the belief that one’s contributions would be welcomed and considered. However, as the results were examined, it became apparent that the impacts of my input variables were not consistent across all components of partnership success, as expected. This inconsistency suggests that despite significant correlations among the three Y-AP success components and reasonable Cronbach’s alphas, the components should not be aggregated conceptually into an overall measure of youth-adult partnership success at this exploratory stage of research in this domain. As such, the
significant mean differences that I found on the overall Y-AP success measure will not be discussed further. However, the general issue of how partnership success should be measured will be discussed in greater detail below.

Discussion of Results by Hypothesis

Hypothesis 1: Effects of Expertise on Y-AP Success

The first hypothesis was that, across warmth and task conditions, there would be a main effect for adult-expertise in which higher adult expertise would produce greater scores in all of three Y-AP success components. The results indicated a main effect for expertise on all three the Y-AP success components. These findings were consistent with the current literature, which suggests that high-expertise adults can provide youth with skill-sets and information that can help the youth succeed (Sullivan & Larson, 2012) and improve productivity by making it more likely for the partnership to attain its goals.

Likewise, through increasing productivity, adult expertise can bolster positive affect through a mechanism known as the “affect theory of social exchange” (Lawler, 2001). This theory stipulates that experiencing repeated success with someone will lead to association of positive feelings towards that person and, by proxy, the partnership. Hence, through their promotion of productivity, high-expertise in adult partners also likely elicits positive affect, as their youth partners come to associate the partnership with the positive emotions that derive from repeated success in their endeavours.

There are practical implications of these results. For instance, they provide guidelines for the provision of training for potential adult partners and demonstrate that youth may stand to gain much from being exposed to these high-resource adults. It may not be enough for an adult partner simply to work alongside youth on a task. Ideally,
adult partners should be capable of demonstrating a strong proficiency in whatever task on which the partnership chooses to focus.

It is helpful to remember that part of the reason youth-adult partnerships are viewed so positively in the existing literature is that they have the potential to help youth develop their skills and talents (Larson, 2000), as well as fostering the development of efficacy and a sense of empowerment (Watts & Flanagan, 2007). Certainly, some youth will enter into partnerships with a strong sense of purpose and desire to contribute but others may initially lack the skills needed to plan effectively and facilitate or communicate their ideas to their partners. The latter youth may require additional time to develop these skills before their levels of contribution can match those of their adult partners.

It is also worth mentioning that many youth, particularly those who live in socially disadvantaged areas, may have limited opportunities to become meaningfully involved in their communities (Furlong & Cartmel, 1997; Zimmerman, 1990). As a result, it may take time for these youth to become convinced that their contributions in partnerships with adults are truly being taken seriously. Many youth-adult relationships in adolescence, namely parent-child and teacher-child relationships, provide few opportunities for autonomous decision making. Indeed, there may be even fewer opportunities for such decision-making in adolescence as compared to middle-childhood (Eccles et al., 1993, 1996), as a response to adolescent’s questioning authority and pushing for increased autonomy. As such, it may take time for youth to rethink their roles in relation to that of adults when first entering a partnership. It is interesting that significant mean differences for Expertise were found for all three success components,
given that the study was hypothetical in nature and focused on first impressions. Although the main effect of expertise on all three components supports our hypotheses, it is important to note that for two of these components (Positive Affect and Contribution), the expertise variable was qualified by the presence of a higher-order interaction. For this reason, we must use caution when interpreting the significant mean differences of expertise and focus on these effects within the context of the qualifying interaction. These interactions will be discussed in greater detail in the sections below.

**Hypothesis 2: Effects of Warmth on Y-AP Success**

In the second hypothesis, I predicted that, across expertise and task conditions, there would be a main effect for warmth in which higher adult warmth would produce higher scores in all three Y-AP success components. As previously discussed, researchers have conceptualized warmth as relating to qualities such as social closeness, trust, friendliness and likability (Markey & Markey, 2006) and as including behaviors such as “the degree of smiling, laughing, positive tone of voice, and verbal and physical affection” (Eisenberg et al., 2005, p. 7).

The results indicated a main effect of warmth in the affect component of partnership success, but no main effects for the productivity or contribution component. The main effect of warmth on the affect component was consistent with the existing literature; however, the absence of main effects on the productivity and contribution components has a more complex relationship with current research and shall be discussed in greater detail below. In addition, for the affect component, the significant mean differences associated with warmth were qualified by the expertise variable and thus
should be discussed within the context of the higher-order interaction, as shall be done below.

Two interactions involving warmth were found: warmth by expertise on the affect component and warmth by task difficulty for the productivity component. The warmth by expertise interaction shall be discussed in this section; the warmth by task difficulty interaction shall be discussed in the third section, which focuses on the role of task difficulty.

Previous studies have demonstrated that warmth is strongly related to positive youth-adult relationships and positive youth outcomes such as competence. For example, within the mentoring literature, warmth, along with flexibility and openness, has been cited as an important characteristic of a good mentor (Taylor & Bressler, 2001). Further, Sullivan and Larson (2010) posited that adults who demonstrate warmth (i.e., they are friendly, respectful and encouraging) are ideal for interacting with youth. Aspects of youth-adult relationships, such as being warm and trusting (Scales et al., 2011), were found to be important to positive youth development and, in addition, adult warmth in after-school programs has been shown to have a positive impact on youth outcomes (Rhodes, 2004). Similarly, evidence within the parenting literature has linked parental warmth with youth competence (Roberts & Strayer, 1987).

A significant interaction between warmth and expertise also was found for the affect component of Y-AP success, in which participants who were in the low-warmth, low-expertise conditions produced lower affect scores than participants in any other condition. In other words, the effects of being paired with a low-warmth adult were exacerbated when the adult was also low in expertise.
So why does the impact of low-warmth on the affect measure only emerge when participants are paired with low-expertise adults? An alternate way of asking this question is, with regard to positive affect, how might high-warmth mitigate any potential negative effects on Y-APS from low-expertise, and how might high-expertise do the same for low-warmth? What protective factors do these two characteristics offer with regard to how they influence positive affect? While this study cannot determine the mechanism by which high adult expertise may serve as a protective factor against low warmth or high warmth serve as a protective factor against low expertise, it is possible that the risk factors associated with being paired with a low expert or low warmth adult are additive in nature (Sameroff, Seifer, & Bartko, 1997). If so, the risk contributions associated with combined low warmth or low expertise may reach a “tipping point”, which may elicit the reduced perceived positive affect scores witnessed in the results. Studies in the field of youth resilience (Smokowski, Reynolds & Bezrucko, 1999) have shown that both internal factors (e.g., determination, perseverance) and external support (e.g., motivational support from family members) served as protective factors against adverse circumstances and promoted successful adjustment in adolescents. In the same manner, a high level of adult warmth may be enough to serve as a protective factor against working with an adult who is low in expertise, and likewise high-expertise may buffer the effects of low-warmth.

The significant main effect of warmth on the affect measure was consistent with the existing literature. However, the interaction between warmth and task difficulty on the productivity measure conflicted with the second hypothesis, that higher adult warmth would produce higher scores on all three success measures. Recall that in high-difficulty
task conditions, higher productivity scores were produced by the low-warmth adult condition. Since the existing literature suggested that adult warmth was important for positive relationships with youth and positive youth outcomes, I hypothesized that adult warmth would hold the same importance for youth-adult partnerships. I predicted that warmth would play a significant role in all three components of youth-adult partnership success. However, the results indicated that adult warmth did not affect all three components of partnership success in the same way.

I will now address the surprising lack of a significant mean difference of warmth on the contribution component. No main effect was found, nor was any significant interaction involving warmth. The contribution measure, created to reflect youth expectations that their contributions would be considered and welcomed, was created on the basis of Camino’s (2006) position that it was mutuality of teaching and learning that differentiated youth adult partnerships from other forms of youth-adult relationships and that this mutuality was essential to the success of a Y-AP.

I expected that participants would report higher contribution scores when the adults were high in warmth due to the link between warmth, trust and social closeness (Markey & Markey, 2006) and the expectation that youth would be more likely to contribute to a partnership if they felt a certain degree of trust and comfort with the adult partner. Although feelings of trust and comfort may not directly equate to believing that one’s contributions are welcomed and considered, it is worth noting that before adult partners can consider and welcome youth contributions, youth must first be willing and able to make such contributions. Fostering an environment of trust and closeness may serve to encourage youth in making these contributions.
One potential reason warmth did not play a significant role in the contribution component of Y-AP success may be in the unintentional impact warmth may have on the focus of a partnership. While warmth has been described within the literature as being beneficial to a partnership (Taylor & Bressler, 2001; Rhodes, 2004; Roberts & Strayer, 1987; Sullivan & Larson, 2010), my results indicate that warmth may not actually improve the extent to which youth believe that their contributions will be welcomed and considered by the adults. In fact, warmth actually may be detrimental to fostering the specific component of youth contribution. In the context of engagement as “the meaningful participation and sustained involvement of a young person in an activity, with a focus outside of him or herself” (Pancer, Rose-Krasnor, & Loiselle, 2002, p. 2), it is possible that a shift in focus from an external goal to an internal one may disengage youth and reduce their willingness to contribute to the partnership. Too much warmth may produce high positive affect, which may cause youth to focus more on their own internal states and less on what they can contribute to the partnership. Recent literature in the field of cognitive psychology suggests that positive affect can lead to increased distractibility (Dreisbach & Goschke 2004), a factor that may result in youth becoming disengaged and disinterested. Thus, any significant relationship between adult warmth and contribution may not become apparent without including additional moderating variables. These moderators may include the extent to which youth are easily distracted, perceived meaningfulness of the task and the youth’s level of interest during partnership activities.

Future studies should focus on path analysis, tracking the relationships between input variables (e.g., warmth) to Y-AP success components (e.g., positive affect) and Y-AP success components to different aspects of youth development (e.g., the
development of initiative) to understand how positive affect within these partnerships may help foster the positive outcomes associated with Y-APs. In addition, researchers should study the trajectories of youth-adult partnerships across time, measuring youth experience of positive affect intermittently, with youth providing ratings of warmth and expertise within the first week of working with an adult partner. Although it may be unethical deliberately to pair youth with low-warmth, low-expertise adults with the intention of observing differential rates of attrition, particular focus should be given to existing partnerships that meet these criteria, with youth providing ratings of positive affect periodically. To focus on the possible compensatory and additive risk function of warmth and expertise, future research also should aim to identify how the effects of low adult warmth may exacerbate the effects of low adult expertise (and vice versa) and how moderate or high levels of one variable can serve as a protective factor against low levels of the other.

**Hypothesis 3 The Interactive Effects of Task and Adult Characteristics on Y-AP Success**

In the hypothesis that the effects of expertise and warmth would vary as a function of task difficulty, in which high adult expertise would predict higher Y-AP success scores in High-Difficulty Task conditions and high adult warmth would predict higher Y-AP success scores in Low-Difficulty Task conditions, I predicted that the effects of expertise and warmth would vary as a function of task difficulty, in which high adult expertise would predict higher Y-AP success scores in High-Difficulty Task conditions and high adult warmth would predict higher Y-AP success scores in Low-Difficulty Task conditions.
The primary reason for the inclusion of task difficulty as a variable in this study was that existing studies have not systematically controlled for the role of context when exploring youth-adult partnerships. The second reason for including task difficulty was to determine whether qualities of the adult partner could be moderated by the perceived difficulty of the task.

While there are many other variables at play when considering the overall context of a partnership, task difficulty was chosen because it was simple to manipulate systematically and had relatively few complicating variables, all of which were relatively easy to control (e.g., youth's perception of task difficulty). In addition, results from the task difficulty variable provided the initial evidence for a partner-context interaction, laying a foundation for future studies of contextual influences.

Overall, the hypothesis that the effects of expertise and warmth would vary as a function of task difficulty, in which high adult expertise would predict higher Y-AP success scores in High-Difficulty Task conditions and high adult warmth would predict higher Y-AP success scores in Low-Difficulty Task conditions was only partially supported. First, task difficulty only interacted with warmth and expertise on two of the three perceived success components (productivity and contribution); no interaction was found for expected positive affect. Second, even within the two components in which perceived task difficulty interacted with warmth and expertise, the pattern of interaction was not as expected. In addition, a significant main effect for task difficulty was found on the perceived productivity measure, although this was qualified by a higher-order significant interaction and will thus be discussed within this context. The nature of these interactions, and the potential explanations provided, will be discussed below.
One result, contrary to my hypothesis, was that task difficulty did not have any significant effect on perceived positive affect. One reason for this unexpected result may be that the upper-range of task difficulty may not have exceeded the youth's perceived ability to complete the task successfully. In other words, while the tasks may have varied in difficulty, they may not have been different enough in difficulty for one task to be perceived as being possible and the other as being extremely difficult or impossible to accomplish. Thus, according to the “affect theory of social exchange” (Lawler, 2001), since the variable of task difficulty did not influence participants’ expectations of failure or success, it also did not influence whether participants perceived they would have experienced positive affect within the partnership.

I will now address a second discrepancy with my hypothesis, which is why task difficulty did not interact with warmth and expertise in the expected manner. In this section, I will also attempt to explain why no main effect for warmth was found on the contribution component, as the explanations I provide are linked conceptually and will be more easily understood when presented in this sequence.

In further addressing the second discrepancy with my hypothesis, why task difficulty did not interact with warmth and expertise in the expected pattern, I will attempt to explain how and why task difficulty interacted significantly with expertise on the contribution measure. In this interaction, participants who were exposed to high-expertise hypothetical adults and who were presented with low-difficulty tasks produced the highest perceived contribution scores than any other combination of expertise and task difficulty; the other conditions did not produce contribution scores that varied significantly from each other.
So, why was no main effect for expertise found on the contribution measure and why did participants who were faced with low-difficulty tasks do best when paired with high-expertise adults? First, it is helpful to ask why the effects of expertise are significant only under these very specific circumstances and what this can tell us about the nature of the mechanism by which high-expertise produces positive contribution outcomes. In answering this question, I draw a parallel between the role of task difficulty and a concept described by Larson (2006) as the intentionality paradox. The intentionality paradox describes the seemingly contradictory nature of adult involvement in youth development in which adults want to guide youth and protect them from negative outcomes, while at the same time supporting youth intentionality and leadership. Larson argued that when adults err strongly on either side of this paradox (i.e., provide too much or too little guidance) there are negative consequences, and that a balance is needed for optimal development. To summarize the implications of this paradox for my purposes, when partnerships are predominantly adult-led, youth are at risk to lose a sense of ownership, motivation and engagement. However, when adults let youth “take the reins”, youth can sometimes become distracted and work on tasks within Y-APs can become stalled, which could lead to a decline in motivation and investment in youth partners.

Likewise, when a task is of low difficulty, the lack of challenge may fail to keep youth interested and focused, leading to the same potential negative outcomes sometimes faced by youth-led partnerships. The idea of an optimal level of challenge was a key component in Csikszentmihalyi’s (1975) concept of “flow”, defined as a state of being that is characterized as being intrinsically enjoyable, self-reinforcing, and moderately
challenging. When the task is at an optimal level of difficulty, youth are able to work towards completion of the task, perhaps with some assistance. However, when the task lacks challenge, youth may become distracted and lose motivation, thus likely leading to a decline in youth contribution in the partnership.

By what mechanism might adult expertise contribute to higher contribution scores in low difficulty tasks? Recall that my conceptualization of expertise was based on Sullivan and Larson’s (2010) conceptualization of “high-resource adults”, who provide youth with “information, socialization, and access to the adult worlds they eventually need to join” (p. 100). While these high-expertise adults may not impact contribution consistently across all conditions (resulting in an absence of a main effect for expertise) they could, perhaps, serve as a bridge to youth contribution through modeling strategies to keep youth focused and on-track during low-difficulty tasks. For example, these adults may demonstrate initiative, planning, and effective communication (Larson, 2000), which may model how to navigate successfully the challenges of approaching a new task. Thus, pairing youth with a high-expertise adult, as opposed to a low-expertise adult, may help provide youth with strategies to avoid distraction. This increased focus, coupled with the ability of the youth to contribute to the task at hand, may explain the bolstered perceived contribution scores.

In future, investigators should follow youth-adult partnerships across time, assessing the extent of the adult partner’s expertise at the onset of the partnership and observing any potential differences in how high-expertise and low-expertise adults help youth overcome barriers to having youth contributions welcomed and considered within the partnership. Specifically, researchers should obtain youth ratings of task difficulty in
real-life partnerships and record any qualitative differences between Y-AP interactions in easy versus difficult task conditions.

In summary, the original proposed model was only partially supported. The results suggest a need for further discussion in several areas, including the nature of defining youth-adult partnerships, mechanisms responsible for partnership-related youth outcomes, and practical implications suggested by the current findings. Next, I will address these concerns and offer elaboration on how the current study contributes to the existing body of literature and what questions need to be asked next to help complete our understanding of youth adult partnerships and the functions they serve. It is worth emphasizing that my hypotheses surrounding task-difficulty were exploratory in nature and that, while the findings did not support my hypothesis for task difficulty, the significant interactions with task difficulty that were found offer exciting insight into the nature of youth-adult partnerships.

**General Discussion**

While the results did not fully support the initial hypotheses, it is worth noting that all three input variables (warmth, expertise and task difficulty) had some significant relationship with at least one of the Y-AP success variables, whether by way of a main effect or an interaction. These findings do not necessarily negate the original model but rather call for a reductionist approach in which Y-AP success can be explored in terms of its individual components. I will now discuss several major themes and issues that emerged from the current findings.
The Importance of Perceptions and First Impressions

A major contribution of this study is the confirmation that youth’s perceptions of youth-adult partnerships can be influenced before the partnership has even been formed. It is not known how much weight these first impressions could carry across the course of the partnership, or whether these expectations would be verified or disproven if the hypothetical partnerships could be translated into actual ones.

Individuals are remarkably accurate at identifying specific personality traits (e.g., openness, extraversion and conscientiousness) after viewing people responding to questions on video (Scmid Mast, Bangerter, Builliard, & Aemi, 2011) and may be accurate in forming initial first impressions of their adult partners. However, even when first impressions are not accurate, initial attributions made about a person can lead to a confirmation bias when receiving subsequent information about the person (Nickerson, 1998), potentially influencing views of the person over time. Thus, while I cannot know for certain how first impressions may impact the long-term trajectories of youth-adult partnerships, it appears that initial meetings can impact how youth come to perceive partners across time. The findings suggest that characteristics of the adult partner and the perceived difficulty of the task, as moderated by those characteristics, have a significant impact on youth expectations of whether the partnership will be productive, will elicit positive affect and whether their contributions will be welcomed and considered. Further, these expectations may be important for the process of youth engagement because they may influence how youth behave within the partnership or even whether they decide to enter into the partnership at all.
Defining Youth-Adult Partnerships

The results of the current study indicated that the input variables affected the three measures of partnership success in different ways. These findings have implications for my original definition of a youth-adult partnership. In particular, the idea of Y-AP success as an aggregate of the three positive qualities that have been associated with successful Y-APs in the existing literature has to be revised. The factors that I found to influence the success of Y-APs should be understood in terms of how they affect the specific aspects of Y-AP success, rather than an overall Y-AP success construct.

For example, warmth did not produce significant mean differences on all of the Y-AP success components. These findings strengthen the overall notion that important elements of Y-AP success should not be merged into a composite measure because this aggregate measure may obscure the differential impact of various factors that may influence the outcome of the partnership.

If we make the assumption that adult and task variables influence different aspects of Y-AP success (productivity, affect and contribution) in different ways, it also may be the case that these aspects of Y-AP success affect youth outcomes in diverse ways. For example, if having one’s contributions welcomed and considered is a stronger predictor of youth engagement than experiencing positive affect, then opportunities for contribution should be examined to optimize the likelihood that youth who enter into Y-APs experience the full benefits of youth engagement. As discussed above, existing literature has linked Y-AP involvement to youth engagement and the aim of this study was to identify which—and how—external factors contributed to the success of Y-APs. However, given the current findings, perhaps the elements of a successful partnership
should be examined individually in order to understand better the mechanism by which youth who belong to Y-APs become engaged.

While my findings support previous correlations between adult-warmth and positive outcomes, my experimental design has allowed me to focus in on the relationship between these variables. A question that arises from this compartmentalized view of partnership outcomes is how the definition of a youth-adult partnership is related to the positive outcomes that are associated with belonging to a youth-adult partnership. In other words, how do we differentiate between youth-adult partnerships and *successful* youth-adult partnerships? In a similar vein, researchers and theorists should ask whether a successful youth-adult partnership is defined by its associated youth outcomes or by a set of defining characteristics that can be measured separately from the partnership’s impact on its youth partner. The answer to this question is going to depend partially on what one views as being the goal of youth-adult partnerships. If the goal is the promotion of the development of positive youth outcomes (e.g., competency, communication skills, leadership skills), then the measure of a successful youth-adult partnership would be the extent to which these outcomes were experienced by youth within the partnership.

The outcome components I have chosen (productivity, affect and contribution) were selected because they have been included as important factors in existing conceptualizations of youth-adult partnerships. Investigators and others interested in youth engagement have accepted that the goal of youth-adult partnerships is to foster and develop youth skill sets and competencies, and previous literature has established that adult-warmth within youth-adult relationships can lead to such positive outcomes. If we accept these goals and outcomes, then it would not be necessary for an input variable to
benefit (or even impact) all components of a youth-adult partnership to be considered influential to the success of said partnership.

So, what relevance does this have to the absence of relationship between adult-warmth and the two outcome components of productivity and contribution? To state it simply, the overall findings suggest that a more compartmentalized model of youth-adult partnerships is needed. I found evidence linking input variables to Y-AP component variables; an important next step in the research literature should be to acknowledge the potential for unique paths by which different factors impact youth-adult partnerships and explore the potential for unique mechanisms for each of these factors.

**Strengths, Limitations and Future Directions**

This study included several new elements that have been lacking in much of the existing literature. First, it is unique in that it is an exploratory, experimental design that allowed for inference of causality. As a result, the findings that were obtained were more clearly interpretable than those obtained through more typical correlational or qualitative designs. The methodology of this study has allowed me to isolate components of a Y-AP and identify, with confidence in directionality, how some important adult and task qualities impacted youth's perceptions of youth-adult partnerships on a variety of outcomes. There are few instances in the literature in which Y-APs have been explored using an experimental design, and I believe that the use of an experimental design allowed for a more in-depth understanding of the variables I selected to examine. A second strength of my research is its potential to account for fluctuations in the degree to which a Y-AP is adult or youth-driven by taking youth perception of task difficulty into account. In doing so, it also attempts to integrate the element of context into our
understanding of partner roles within a Y-AP. A third strength of my research is its
generalized applicability. My three measures of a successful Y-AP allow for Y-APs to be
evaluated across many contexts and do not confound the outcomes of a successful Y-AP
with the characteristics of one. Thus, as part of this study, I developed a three-component
measure of Y-A-P success; the development of this measure was conducted in the pilot
study described below. This contribution to the literature represents a further strength of
this study.

Several limitations to the present study should be noted. Both the original and
revised theoretical models, although based on the mutual dynamics of a partnership, were
limited in scope in that they did not capture the bi-directionality of the partnership.
Similarly, I could not account for the changes that may occur as partnerships evolve
across time. The relationships between variables that I found in this study should be
examined across time to account for the developmental nature of these partnerships,
similar to the four-month qualitative study done by Larson and colleagues (2005). I also
do not know whether the relative importance of the input variables may vary, depending
on the stage of the partnership. It could be that some input variables are important in
initiating partnership involvement, while others may be more important for sustaining it
(Rose-Krasnor, 2009). I have provided a starting point, but the links I discovered should
to be studied longitudinally to understand fully their influence on youth development.

The experimental nature of this study prevented me from measuring many things
that may be of great importance to the study of youth-adult partnerships. Examples of
these variables are reciprocity, the development of intimacy, and how the partners handle
success and failure. Another potentially important variable is respect. The extent to
which the adult partner respects the youth partner and the extent to which the youth partner respects the adult partner may outweigh the importance of both warmth and expertise. Partners may be warm and have great expertise in areas relevant to the partnership, but if they do not command the respect of their partner, the partnership may ultimately be doomed to failure (Baker, Homan, Schonhoff, & Kreuter, 1999).

Another limitation of the present study is its focus on first impressions, perceptions and expectations, rather than reactions to actual partnerships. Youth expectations may not correspond to how they would actually respond or perceive a real partnership and variables may emerge in real-life situations that would not in hypothetical scenarios and I cannot claim that my findings accurately reflect how youth would actually respond. Choosing an experimental design requires weighing the benefits of ecological validity against the importance of finding results that are scientifically sound. Due to the tendency for research in the field of youth-adult partnerships to be qualitative in nature, I chose to pursue clarity of results and relationships, at the possible expense of obtaining ecologically valid “usable knowledge” (Lagemann, 2002).

Levene’s test was found to be significant for only one measure, Productivity, thus indicating a violation of the assumption of homogeneity of variances. As a result, although the necessary methodological compensations were made, caution must be used in generalizing the findings related to the productivity measure beyond the current sample.

Another concern that arose from the data was an unequal representation of men and women with too few men to allow me to test for gender as a potential moderator. Thus, the results may be limited to young women or same-sex Y-APs, as the individual in
the video was female. Future researchers should attempt to replicate findings with a balanced sample of men and women participants and investigate the effects of partner sex (i.e., same-sex partnerships vs. mixed-sex partnerships). Future studies should examine whether same-sex and opposite-sex partnerships differ and if male and female youth respond to adult characteristics and qualities, such as warmth and expertise, differently.

The age range was quite limited due to a methodological decision to limit the age of my participants to ensure a sufficient difference in age between those who completed the study and the actress who portrayed the adult. The reason for this age difference was to establish the salience of the actress as an “adult” relative to the participants. If I allowed people who were in their 40s and 50s to participate, then I would not be studying youth-adult partnerships but, rather, partnerships in general.

One key methodological weakness of my study was the decision not to counterbalance the order of video presentations in my pilot study. I had initially intended to do so, but the basic survey composition and research design had become very complicated and it would be been very difficult to randomly assign participants to all 24 possible orders of presentation, particularly since my sample size was relatively small. As a result, there is a possibility that my results were impacted by order effects and this may, in turn, affect the generalizability of my findings.

There are several unresolved theoretical questions that persist or have arisen from the completion of this study. One concerns a lack of clarity in the relation between the concept of partnership itself and indicators of its success. Specifically, I have established that partnership success can be used as a measure, but it is confounded by also potentially serving as part of the definition of partnership itself. For example, suppose an adult and a
youth are paired on a joint task and they fail to work productively, lack any semblance of positive affect, and the youth does not contribute to the task. Would this interaction be a failed youth-adult partnership or would it be more accurate to say that no partnership existed in the first place? Further discussion should occur in determining the minimum qualifications needed for a youth-adult dyad to be considered a “youth adult partnership” and not just two people in a room together. While I do not have the answer to this question, it does raise an important point that Y-AP success cannot be determined solely by using data from experimental research.

In addition, although I have explored the role of task difficulty, I have not investigated the role of task importance or relevance. The motivation and behaviour of youth within a Y-AP may be less influenced by their adult partners than they are by the importance the youth place on the task at hand. Future investigators should study the developmental trajectories of youth within partnerships who are working on tasks that vary in the extent to which youth value the outcome of the task. It may be difficult to manipulate the meaningfulness of a task to individuals but this potentially very important variable may be an important factor in the Y-AP process.

As a final note, I urge the reader to consider the practical implications of researching youth-adult partnerships and the conditions surrounding them. While there are many benefits to be gained for adult partners and society as a whole, the importance of youth-adult partnerships for the positive development of youth should be kept in the forefront of concern when interpreting studies pertaining to the success of these partnerships. We must ask ourselves what factors are most important for long-term youth development and how youth-adult partnerships can optimize these factors.
References


APPENDIX A - Hypothetical Adult Partner Screen Directions

The following are the directions which were given to the female actress for each of the adult roles.

1) High expertise/High warmth

Imagine that you are a volunteer at an organization which helps youth transition from high school to university and that you are meeting another volunteer for the first time. In a warm manner, say “Hi, my name is _________. I’m looking forward to working with you”. Then say the following: “I’ve worked at a University student service centre for 20 years and have a lot of experience helping new students adjust to university. I’ve worked one-on-one with students, helped them find employment when needed, connected them to other people and organizations that could help them and help them understand how the university works as an organization so that they are better prepared to deal with the various challenges associated with completing a degree.”

2) High expertise/Low warmth

Imagine that you are a volunteer at an organization which helps youth transition from high school to university and that you are meeting another volunteer for the first time. With a polite business-like manner, say “Hi, my name is _________. I’m looking forward to working on this task”. Then say the following: “I’ve worked at a University student service centre for 20 years and have a lot of experience helping new students adjust to university. I’ve worked one-on-one with students, helped them find employment when needed, connected them to other people and organizations that could help them and help them understand
how the university works as an organization so that they are better prepared to
deal with the various challenges associated with completing a degree.”

(3) Low expertise/High warmth

Imagine that you are a volunteer at an organization which helps youth transition from high school to university and that you are meeting another volunteer for the first time. In a warm manner, say “Hi, my name is ________. I’m looking forward to working with you”. Then say the following “I’ve worked at a University finance department for 20 years and have a lot of experience working with online accounts and student records. I’ve spent years managing student financial files, running analyses on financial data for use in creating the university’s budget, compiling and archiving tax records and creating forms for students to complete when applying for financial assistance.”

(4) Low expertise/Low warmth

Imagine that you are a volunteer at an organization which helps youth transition from high school to university and that you are meeting another volunteer for the first time. With a polite business-like manner, say “Hi, my name is ________. I’m looking forward to working on this task”. Then say the following: Then say the following: “I’ve worked at a University finance department for 20 years and have a lot of experience working with online accounts and student records. I’ve spent years managing student financial files, running analyses on financial data for use in creating the university’s budget, compiling and archiving tax records and creating forms for students to complete when applying for financial assistance.”
APPENDIX B - Hypothetical Task Scenarios

Task 1 – Low-difficulty task description

The task on the agenda is to put together an informational booklet that will help student prepare for their first year of University. Since many of these students will also be living away from home for the first time, it’s important to include information on the day-to-day challenges they might experience as well as academic challenges. You can draw largely from your own experiences in creating this booklet.

Task 2 – Difficult task description

The task on the agenda is to create an informational booklet for students who are living with various disabilities. The booklet should include information pertaining to the day-to-day challenges these students will face, resources they can access through the school and resources they can access through the community. This task will require you to contact many organizations to obtain information and details on how they can be contacted.
APPENDIX C – Pilot Test Items – Warmth and Expertise

Participants were given the instructions:

Please imagine that as part of the requirements for your undergraduate degree, you have been asked to volunteer your time to a charitable organization. An adult will be working with you.

Participants were then presented with a video of one of the four hypothetical adults. Each participant viewed all four videos, which were separated by sets of 3 task-pairs. Following the presentation of each video, participants were then asked to respond to the following 8 questions (See Appendix B).

**Pilot Test: Hypothetical Adult Warmth Items**

<table>
<thead>
<tr>
<th></th>
<th>1 = Not at all</th>
<th>2 = A little</th>
<th>3 = Moderately</th>
<th>4 = Quite</th>
<th>5 = Very</th>
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<tr>
<td>1. How warm does this person seem?</td>
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<td>2. How friendly do you think this person would be to work with?</td>
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<td>3. How much encouragement would you expect from this person while working with them?</td>
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<td>4. How much criticism would you expect from this person while working with them?</td>
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### Pilot Test: Hypothetical Adult Expertise Items

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<th>1 = Not at all</th>
<th>2 = A little</th>
<th>3 = Moderately</th>
<th>4 = Quite</th>
<th>5 = Very</th>
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<tr>
<td>5. How much expertise do you think this person has that is relevant to the task at hand?</td>
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<td>6. How helpful do you think this person would be to work with?</td>
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<td>7. How useful would you expect this person’s contributions to be?</td>
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<td>8. How reluctant would you be to taking this person’s advice while working with them?</td>
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APPENDIX D – Pilot Test Items - Perceptions of Task Difficulty

In between watching and responding to questions involving the videos of the hypothetical adults, participants were presented with nine sets of hypothetical tasks. Following individual task (not set of tasks), participants responded to the following seven questions (See Appendix C).

Please respond to each of these questions along based upon the task you have just read:

1. How much effort do you think this task would take to complete?

   1 = Nearly none  2 = A little  3 = Moderate amount  4 = Quite a bit  5 = Very Much

2. How difficult do you think it would be for the average person to complete this task?

   1 = Not at all  2 = A little  3 = Moderately  4 = Quite difficult  5 = Very difficult

3. How easily do you feel you could complete this task?

   1 = Not at all  2 = A little  3 = Moderately  4 = Quite easily  5 = Very easily

4. How confident do you feel in your ability to complete this task?

   1 = Not at all  2 = A little  3 = Moderately  4 = Quite confident  5 = Very confident

5. Overall, how difficult do you think this task would be to complete?

   1 = Not at all  2 = A little  3 = Moderately  4 = Quite difficult  5 = Very difficult

6. Have you ever completed this type of task before?

   1 = Yes  2 = I have completed similar tasks  3 = No

If “1” or “2”, please provide a brief description of the task/tasks on the line below:

7. Do you have any experience that would help you complete the task?

   1 = Yes, the task/s I described above  2 = Yes, other experience  3 = No

If “2”, please provide a brief explanation of this experience on the line below:
APPENDIX E – Ethical Approval for Pilot Testing

The Brock University Research Ethics Board has reviewed the above named research proposal and considers the procedures, as described by the applicant, to conform to the University's ethical standards and the Tri-Council Policy Statement. Clearance granted from 3/3/2011 to 3/31/2012.

The Tri-Council Policy Statement requires that ongoing research be monitored by, at a minimum, an annual report. Should your project extend beyond the expiry date, you are required to submit a Renewal form before 3/31/2012. Continued clearance is contingent on timely submission of reports.

To comply with the Tri-Council Policy Statement, you must also submit a final report upon completion of your project. All report forms can be found on the Research Ethics web page.

In addition, throughout your research, you must report promptly to the REB:

a) Changes increasing the risk to the participants and/or affecting significantly the conduct of the study;

b) All adverse and/or unanticipated experiences or events that may have real or potential unfavourable implications for participants;

c) New information that may adversely affect the safety of the participants or the conduct of the study;

d) Any changes in your source of funding or now funding to a previously unfunded project.

We wish you success with your research.

Approved:

Michelle McGinn
Chair
Research Ethics Board (REB)

Note: Brock University is accountable for the research carried out in its own jurisdiction or under its auspices and may refuse certain research even though the REB has found it ethically acceptable.

If research participants are in the care of a health facility, a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and clearance of those facilities or institutions are obtained and filed with the REB prior to the initiation of research at that site.
Informed Consent Form

Study Name: Perceptions of Hypothetical Adults
Researchers: Ashley MacIntosh (MA Candidate, Brock University), Linda Rose-Krasnor (Professor, Brock University)
Organization: Brock University

Purpose of the Research: The purpose of this research is to assess how hypothetical adults are perceived by participants to ensure that these hypothetical adults are being perceived as they are meant to be. This is important, as we will be using these same hypothetical adults as part of a larger study.

What You Will Be Asked to Do in the Research: You will be asked to read a description of an adult and respond to questions about how you feel about them. It will take approximately 15 minutes to complete.

Risks and Discomforts: We do not foresee any risks or discomfort from your participation in the research.

Benefits of the Research: The larger study that this pilot study is part of will help organizations improve the relationships between youth and adults who work together.

Voluntary Participation: Your participation in the study is completely voluntary and you may choose to stop participating at any time. Your decision not to volunteer will not influence nature of your relationship with Brock University either now, or in the future.

Withdrawal from the Study: You can stop participating in the study at any time, for any reason, if you so decide. If you decide to stop participating, you will still be eligible to receive the promised credit for agreeing to be in the project. Your decision to stop participating, or to refuse to answer particular questions, will not affect your relationship with the researchers, Brock University, or any other group associated with this project.

Confidentiality: All information you supply during the research will be held in confidence and unless you specifically indicate your consent, your name will not appear in any report or publication of the research. Your data will be safely stored in a locked facility and only research staff will have access to this information. Confidentiality will be provided to the fullest extent possible by law.

Questions About the Research? If you have questions about the research in general or about your role in the study, please feel free to contact Ashley MacIntosh either by telephone at 905-688-5550, extension 3264 or by e-mail (am09vo@brocku.ca). This research has been reviewed by the Brock University Research Ethics Board, which conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, please contact Ms. Lori Walker (telephone 905-688-5550, extension 4876 or e-mail lwalker@brocku.ca).

Legal Rights and Signatures:

I ________________________________, consent to participate in “Perceptions of Hypothetical Adults”, conducted by Ashley MacIntosh and Dr. Linda Rose-Krasnor. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.
APPENDIX G - Difficulty Control Questions

Measured along a 5-point Likert-type scale ranging from 5 = “Very Much” to 1 = “Not at All” with greater scores reflecting greater perceived difficulty.

1) How confident would you feel in your ability to solve the task on your own? (Reverse coded)

2) How difficult would you find the task?

3) How much help would you need from an adult partner to complete the task?

4) Do you have experience with completing tasks similar to this one? (Reverse coded)
APPENDIX H - Youth-Adult Partnership Success Measure

Instructions:
1. With regards to the video you have just watched and the task you have just read, imagine that you are working in partnership with this person to complete the task you have just read and respond accordingly.

"Productivity" Scale

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<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</thead>
<tbody>
<tr>
<td>I believe that our partnership would reach its goal</td>
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<tr>
<td>I believe that our partnership would produce high-quality work</td>
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<td>I believe that the work done in our partnership would help others</td>
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<tr>
<td>I believe that the work done in our partnership would serve no real purpose</td>
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<tr>
<td>I believe that our partnership would not do a very good job on this task</td>
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Note: Items 4 and 5 reverse coded.

"Affect" Scale

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<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<tbody>
<tr>
<td>I would enjoy the time spent working on a task with this person</td>
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<td>I would expect this person to behave in a friendly manner during our partnership</td>
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<td>I would feel intimidated by this person</td>
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<td>I would like my partner as a person, not just as a partner in work</td>
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<tr>
<td>I don't think I would like this person very much</td>
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Note: Items 3 and 5 reverse coded.
"Contribution"

Scale

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<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would feel comfortable proposing my ideas and knowledge to</td>
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<tr>
<td>this person</td>
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<td>I would feel that my views and knowledge would be listened to</td>
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<td>by this person</td>
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<td>I feel that I would have a meaningful role to play in this</td>
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<td>partnership</td>
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<td>I feel that this person would not really value my contribution</td>
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<td>I feel that this person does not expect me to contribute much</td>
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<td>to this partnership</td>
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Note: Items 4 and 5 reverse-coded
APPENDIX I – Ethical Clearance for Main Study

Certificate of Ethics Clearance for Human Participant Research

DATE: March 21, 2011

PRINCIPAL INVESTIGATOR: ROSE-KRASNOR, Linda - Psychology

FILE: 10-200 - ROSE-KRASNOR

TYPE: Masters STUDENT: Ashley MacIntosh

SUPERVISOR: Linda Rose-Krasnor

TITLE: Precursors to successful youth-adult partnerships: The role of adult warmth and expertise

ETHICS CLEARANCE GRANTED

The Brock University Research Ethics Board has reviewed the above named research proposal and considers the procedures, as described by the applicant, to conform to the University's ethical standards and the Tri-Council Policy Statement. Clearance granted from March 21, 2011 to March 31, 2012.

The Tri-Council Policy Statement requires that ongoing research be monitored by, at a minimum, an annual report. Should your project extend beyond the expiry date, you are required to submit a Renewal form before March 31, 2012. Continued clearance is contingent on timely submission of reports.

To comply with the Tri-Council Policy Statement, you must also submit a final report upon completion of your project. All report forms can be found on the Research Ethics web page.

In addition, throughout your research, you must report promptly to the REB:
  a) Changes increasing the risk to the participant(s) and/or affecting significantly the conduct of the study;
  b) All adverse and/or unanticipated experiences or events that may have real or potential unfavourable implications for participants;
  c) New information that may adversely affect the safety of the participants or the conduct of the study;
  d) Any changes in your source of funding or new funding to a previously unfunded project.

We wish you success with your research.

Approved: 

Jan Fiala, Acting Chair
Research Ethics Board (REB)

Note: Brock University is accountable for the research carried out in its own jurisdiction or under its auspices and may refuse certain research even though the REB has found it ethically acceptable.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and clearance of those facilities or institutions are obtained and filed with the REB prior to the initiation of research at that site.