# Reducing the Affective Filter: Using Canine Assisted Therapy to Support International University Students' English Language Development

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#### **Abstract**

This exploratory mixed-methods study examined the influence of an on-campus canine therapy program on linguistically diverse international students' perceptions of their English language development and stress. Participants were recruited from English language support classes at a mid-size western Canadian university and were randomly selected from a larger pool of participants indicating interest in the study. Seven participants attended five canine therapy sessions in which they interacted with certified therapy dogs working as part of a campus initiative to reduce stress and homesickness on campus. Both formative and summative data collection was done with students completing weekly stress assessments, responding to summative questions asked in an interview, and elaborating on their views in a focus group discussion. The following key themes emerged with students describing: 1) decreased overall stress; 2) improvements in their sense of belonging in the campus community with dogs as social catalysts; and 3) increased opportunities to practice oral language skills through interactions with dog handlers and fellow students in the lab. Implications are discussed within the context of reducing the affective filter for language learners and increasing accessibility to programs for international students.

## Introduction

Though often touted as an exciting time when the first steps toward the transition from adolescence to adulthood are taken, being a university student can be a stressful experience (Bland, Melton, Well, & Bigham, 2012; Hales, 2009; Scopelliti & Tiberio, 2010). There is mounting evidence that adjusting to a communal campus life, combined with an increasingly challenging academic workload, presents formidable challenges for many students (Bitsika, Sharpley, & Rubenstein, 2010; Heck et al., 2014; Holinka, 2015). A number of factors have been identified as contributing to this stressful experience, including: difficulty with time management, juggling the demands of post-secondary courses, a poor quality diet, and a lack of sleep (Britz & Pappas, 2010). These factors, in turn, can contribute to students experiencing compromised mental health and well-being (Durand-Bush, McNeill, Harding, & Dobransky, 2015).

Within a Canadian context, stress among undergraduate post-secondary students is pervasive with reports of as many as 30% of students experiencing high levels of stress and 20% reporting they felt overwhelmed in the last 12 months (ACHA, 2013; Adlaf, Demers, & Gliksman, 2005; Durand-Bush, McNeill, Harding, & Dobransky, 2015). Stress has been identified by students themselves to be a key factor inhibiting academic performance (Hindman, Glass, Arnkoff, & Maron, 2014).

The goals of this exploratory, mixed-methods study were twofold: 1) to explore the role that animal therapy might have on facilitating well-being and English language development of international students seeking to ameliorate their English language skills; and 2) to report preliminary outcomes reflecting participants' perceptions of changes in their stress levels, engagement in therapy sessions, and opportunities for language practice. This study strove to answer the following research question: How does participation in an animal-therapy intervention impact English-language learners' perceptions of factors impacting their affective filter and language development?

## **Background**

## **Challenges Facing International English Language Learners**

The university context and the corresponding expectations of being a university student can be especially stressful for international students learning English as an Additional Language (EAL), who are prone to experiencing both language struggles and acculturative stress (Chavajay & Skowronek, 2008; Constantine, Okazaki, & Utsey, 2004). Mui and Kang (2006) define acculturation as a complex process that involves adapting to the beliefs and cultures of a new host country. This adaptation can be both socially and psychologically stressful. Students who struggle to adjust to their new surroundings can experience an increase in anxiety contributing to barriers to language learning (Chavajay & Skowronek, 2008). Mui and Kang (2006) go as far as linking acculturation stress with significant levels of depression.

EAL students are at-risk for underperforming academically when compared to undergraduate students from English speaking backgrounds (Fox, 2005; Roessingh & Douglas, 2012). Several studies reveal that international students with lower English proficiency are especially at risk for dropping out and have higher dropout rates than domestic students (Anisef, Sweet, Phythian, Brown, & Walters, 2010; Derwing, DeCorby, Ichikawa, & Jamieson, 1999; Watt & Roessingh, 1994; 2001).

## **Reducing the Affective Filter**

It has been argued that emotional factors, or what Krashen (1982) coined, the *affective filter*, can positively or negatively influence the language learning process. As language is acquired through comprehensible input, the affective filter is especially important as negative emotional variables can impede and prevent new input from reaching the learner's language acquisition device, thus impeding additional language learning. Factors comprising the affective filter include the extent to which a learner experiences anxiety, self-consciousness, stress, and alienation, and that these factors influence the learner's motivation and confidence. A low anxiety and low stress

environment is optimal for language learning with a low affective filter considered a necessary, but not sufficient, condition for successful additional language acquisition (Schinke-Llano & Vicars, 1993). The work of Lin (2008) showcases the importance of reducing the affective filter through a nurturing instructional style characterized by high levels of instructor praise and encouragement. Richards and Rodgers (2014) posit that a low affective filter can facilitate how efficiently an EAL learner absorbs, practices, and produces the target language. These authors further posit that when the learner has a low affective filter he or she seeks and receives more input from instructors, is more likely to interact with other learners with confidence, and is more receptive to the information and input he or she receives. Additional work by Sheen (2008) supports this contention that anxiety can impede an EAL's receptivity to feedback and his or her linguistic output.

## The Importance of Socialization

One solution to reducing the affective filter of EAL learners might lie in increasing their social network or their perception of social support within their new learning environment. Regardless of whether the student is local or international, a proficient speaker of English or an EAL learner, the post-secondary setting is a complex social environment requiring navigation. There are formal social demands found within students' required coursework (i.e., group work that frequently includes the group grading of assignments) and informal demands that centre on common and cooperative housing arrangements, communal dining, and opportunities to engage in organized university-sponsored social activities. Added to this are the establishment of new friends and friendship circles. Though academic support for struggling students has long been in place (with the advent of "writing centres" or "academic support services" offices), universities have been less clear about the pathways through which students might receive social and emotional support. Although there are typically a plethora of clubs and associations on campus seeking members, the joining of such groups requires social confidence, negotiation skills, and contributions—formidable challenges for students feeling anxious or stressed and a sense of compromised social support.

The degree to which university students integrate themselves socially, to become members of their immediate campus community, appears to most strongly influence the extent to which they persist with post-secondary education (Finnie & Qui, 2008). In their analysis of coping strategies used by university students to manage stress, feeling supported by family, friends, and teachers ranked highest as a protective factor shielding students from the negative effects of stress (Taylor, 2007). Social support acts as a buffer, reducing psychological distress, and helps promote psychological adjustment (Taylor, 2007). When students are followed longitudinally, dropping out is most influenced by the extent to which students are academically and socially integrated into campus life (Wetzel, O'Toole, & Peterson, 1999).

## **Supporting Students Through Animal Therapy**

One strategy to support the transition to university is to increase students' social support and friendship network (Friedlander, Reid, Shupak, & Crippie, 2007). Increasing social support has far reaching implications for students and has been linked to decreased stress and depression and increased academic performance and self-esteem. To support the well-being of students and to

help integrate them into their new campus life, universities routinely offer both formal (e.g., peer-mentoring, dormitory advisor-led activities) and informal (e.g., intramural sports, theme days) programs. Canine animal-assisted therapy programs are increasingly offered on North American university campuses and present an informal means of supporting student well-being, often with a focus on decreasing stress (Dell et al., 2015). The broader field of Animal-Assisted Therapy (AAT) is known to increase well-being in participants through fostering social interaction and communication, creating a sense of community, and decreasing stress and homesickness (Adamle, Riley & Carlson, 2009; Binfet & Passmore, 2016; Fine, 2006; Hunt, Hart, & Gomulkiewicz, 1992; McNicholas and Collis 2000; Tedeschi, Fitchett, & Molidor, 2006; Shiloh, Sorek, and Terkel, 2003).

AAT is a therapeutic approach that introduces trained companion-animals to identified individuals in a variety of settings with the aim of fostering healthy social, emotional, and physical health (Frerickson-MacNamara & Butler, 2010). Falling under the larger area of study know as Human-Animal Interactions (HAI), AAT is often considered an adjunct or complimentary approach to enhance existing protocols used to improve client or patient health (Rosetti & King, 2011; Yorke, Nugent, Strand, Bolen, New, & Davis, 2013). AAT has been used with a variety of animals (from cats to horses to dolphins) within diverse settings (from schools to hospitals to prisons) to meet the needs of diverse individuals (from elementary students to hospital patients to prisoners).

The benefits of AAT are numerous and empirical work in education, psychology, social work, and health care, provide convincing support for its use (Maujean, Pepping, & Kendall, 2015, Nimer & Lundhal, 2007). A number of positive outcomes are noted in response to AAT-based interventions across physical, cognitive, psychosocial, and linguistic aspects of human development (Barker et al., 2003; Cole & Gawlinski, 2000; Marr et al., 2000; Odendaal, 2000). Though no published research could be identified examining the effects of AAT on English language learners, research has been undertaken to examine how AAT impacts the communication and social skills of specialized populations, predominantly, children with autism spectrum disorder (for a review see Chitic, Rusu, & Szamoskozi, 2012).

Within a clinical setting, AAT is one approach through which the defences of clients may be softened, rapport with clients may be established and built, and openness to receiving help may be initiated (Fine, 2010; Kruger et al., 2004). In younger clients, animals are known to contribute to a number of favourable effects including the redirecting of attention, the calming of agitated behaviour, and the decreasing of emotional distress (Boat, 2006; Hart, 2000; Katcher & Wilkins, 1998; Strand, 2004).

AAT holds relevance for EAL learners and moreover has been found to offer numerous benefits facilitating language development. Friesen (2009) argued that interactions with canines helped participants to both generate more questions and to share their own experiences during conversations. Prothmann and colleagues (2006) posited that interactions with canines improved individual emotional balance and social extroversion. Guthrie (2004) noted that learners have a tendency to disengage from learning tasks due to a lack of confidence and, moreover, that handson and practical experiences can counter this disengagement. Though situated in an elementary school and not uniquely for English language learners, Kirnan and colleagues (2015) found



exposure to therapy dogs contributed to young students reporting both academic and dispositional gains. This included improvements in both reading and writing skills and in students' affective outlook on language learning (e.g., increases in positive attitude and enthusiasm arose from exposure to therapy dogs). Taken together, the above findings suggest that exposure to therapy dogs holds potential to positively impact the affective factors related to language development for EAL learners.

The aim of this study was to explore the perceptions of international students from EAL backgrounds who participated in a canine therapy program offered on campus. Previous researchers have identified that dogs serve as social catalysts and that interactions between students and dogs can increase social connections, decrease stress levels, and increase overall student well-being (Fine 2006; McNicholas & Collis, 2000; Wells, 2009). It was hypothesized that participation in a canine assisted therapy program would reduce the affective filter for EAL learners, thus decreasing their stress, increasing their social connections, providing opportunities for language skill development, and enriching their overall language learning experience.

#### Method

#### Recruitment

Both university human and animal research ethics approval and informed consent by student participants were obtained prior to the study. Participants were international students from EAL backgrounds enrolled in mandatory language enrichment classes (a university requisite for students with English language entrance scores that do not meet English language proficiency requirements) at a mid-size, western Canadian university. An overview of the study was made by the lead author to each of the three English for academic purposes classes offered on campus and students were asked to indicate their interest in the study through a sign-up sheet. Across the three classes, 58 students were present and 26 (45%) indicated interest in participating in the study. From this pool of interested students, seven students were randomly selected for inclusion in the study. This sample size is in alignment with recommended sample sizes needed to identify principal themes from interview-generated data when the intent of the study is not to identify between-group differences or to determine correlations among variables but rather to capture participants' viewpoints and experience (Guest, Bunce, & Johnson, 2006).

## **Participants**

Participants were undergraduate students<sup>1</sup> from EAL backgrounds (N = 7, 43 % female, Mage = 21.43, SD = 6.48, range = 18 - 36 years). Three participants (42.9%) identified as Chinese, with the remaining participants identifying as Korean, West Asian, Southeast Asian, and Japanese. Participants' countries of origin included China, Kazakhstan, Taiwan, Iran, and Japan.

<sup>&</sup>lt;sup>1</sup> Of the 8,212 students attending the university campus that was the research site for this study during the 2014/15 academic year, 11.7% were international (The University of British Columbia, 2015).



## **Canine Therapy Sessions**

Participants attended five canine AAT sessions offered on campus as part of a stress reduction program scheduled throughout the academic year to support the larger student body. Titled "B.A.R.K." (Building Academic Retention through K9s), this program consisted of weekly dropin sessions, 90-minutes in duration, in which trained therapy dogs and their community volunteer handlers were brought together to support student well-being (see <a href="www.barkubc.ca">www.barkubc.ca</a> for an overview). Located in a modified classroom on campus, each intervention consisted of stations comprised of a volunteer community dog handler, a trained therapy dog, and other students (typically 3-4 at each station) from the larger campus community. Participants were invited to visit one or more of the stations during their visit and to determine themselves the duration of each of their visits. Volunteer handlers followed a standard protocol that saw them welcome students and use open-ended probes (e.g., asking students how they are, their names, and how the semester is going for them). During visits to individual stations, volunteer handlers encourage students to maintain hands-on contact with the dogs and to ask questions about the dogs.

A total of 14 volunteer dog handlers (85.7% female, Mage = 34.07, SD = 12.59; volunteer animal therapy experience Myears = 2.46, SD = 1.77) and their 17 dogs<sup>2</sup> (64.7% female, Mage = 5.35, SD = 3.20; therapy experience Myears = 2.32, SD = 1.5; 59% purebred (versus mixed breed dogs)) participated in the study.

#### Measures

**Profile of English language ability.** In the following section, we describe the scales used to understand participants' mastery of, comprehension of, and confidence speaking English.

**Self-assessments of language ability.** Participants' English language abilities were assessed (using a 5-point Likert-type scale with 1 = "A" excellent achievement to 5 = "F" or failing) by asking participants to self-assess their grade in their English language class. To further corroborate findings, participants were also asked to more globally rate their English language abilities on a 3-point Likert-type scale (1 = beginner, 2 = intermediate, and 3 = advanced).

**Instructor assessments of language ability.** Using the same scales as above, the corresponding English language instructor for each participant was asked to assign a letter grade (1 = ``A'') excellent achievement to 5 = ``F'' or failing) and to identify the participant's global English language ability using a 3-point Likert-type scale (1 = beginner, 2 = intermediate, and 3 = advanced).

**Self-assessment of language comprehension.** During their individual interview, participants were asked to rate their English language comprehension both during sessions (i.e., when participating in the sessions) and during their day-to-day activities (i.e., when not in a session). Using a five-point, Likert-type scale  $(1 = None \ of \ them \ to \ 5 = All \ of \ them)$ , participants

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<sup>&</sup>lt;sup>2</sup> Three dog handlers worked with two dogs at a time thus accounting for the discrepancy between the number of handlers and dogs reported in sessions.

responded to: 1) "How much of the conversations that took place in B.A.R.K. did you understand?"; and 2) "How much of the conversations that take place outside of B.A.R.K. do you understand?"

**Self-assessment of speaking confidence.** Using a 3-point Likert-type scale (e.g., 1 = low, 2 = medium, and 3 = high confidence), participants rated their confidence speaking English.

*Instructor assessment of speaking confidence.* Using the same scale as described above, instructors rated students' confidence speaking English.

**Stress scale.** Participants self-assessed their stress level upon arrival to (pre-) and upon their departure (post-) from each session using a 5-point Likert-type scale ranging from 1 = Not at all stressed to 5 = Very stressed (see Appendix).

**Engagement.** Participants' engagement during each session was determined by having participants self-assess the extent to which they participated in conversations with, and interacted with, others. In addition, two trained research assistants observed participants during each session and assessed their level of engagement.

**Self-assessment.** A one-item measure using a 7-point Likert-type scale (1 = Fully Disengaged to 7 = Fully Engaged) was used to have participants self-assess their level of engagement at the end of each session.

**Observer assessment.** To corroborate findings, two student researchers also observed each participant's engagement throughout each session and, using the same scale that participants used to self-assess engagement, rated each participant's engagement (as evidenced by interactions with dogs and handlers and fellow students) on a 7-point Likert-type scale ranging from 1 = Fully Disengaged to 7 = Fully Engaged.

## **Implementation fidelity**

In addition to participants' self-assessments and observers' assessments of engagement within each session, implementation fidelity (the extent to which the intervention was delivered as intended) was monitored by tracking the attendance of each participant across the five therapy sessions and recording the duration (in minutes) of each participant's visit to each of the five sessions.

#### **Interview**

Following the final session, participants were individually interviewed to explore their perceptions of participating in the study and their perceptions of language development. Participants' responses to each question were documented verbatim and participants' responses were analyzed using conventional qualitative content analysis (Hsieh & Shannon, 2005). Conventional qualitative content analysis is used to make sense of participant-generated data and is in contrast to direct content analysis that uses predetermined themes from prior research to code responses (Hsieh & Shannon, 2005). Content analysis for this study involved a three-step

process: First, independent raters (a faculty member and an experienced research assistant) identified the global or general themes found within each participant's responses to each question, resulting in 23 themes; Second, without censoring themes, the themes were then collated across questions and across participants to allow commonalities to be identified and the prevalent themes to emerge, resulting in a total of 13 themes; and third, using a "winnowing" process (Wolcott, 1990), the themes were collapsed into categories to reduce redundancy. This resulted in three winnowed themes: 1) Sense of Community; 2) Opportunities to Practice English; and 3) Stress.

## **Focus Group**

Questions for the focus group were developed from the themes identified in participants' interview responses. That is, the prevalent themes identified in participants' responses were used to develop questions that would invite participants to expand upon and delve more deeply into describing topics they raised as important in their individual interviews. All participants attended the focus group discussion and participants' responses to each question were recorded verbatim. Adhering to guidelines for leading a focus group identified by Hennink (2013), the focus group was: facilitated by a trained moderator, conducted within a safe and comfortable environment to foster sharing by participants; specific topics for discussion were determined a priori and presented to participants; and member-checking was done by repeating responses back to participants to ensure viewpoints had been accurately captured.

#### **Results**

## **Profile of Language Ability**

**Self-assessments**. Recall that participants self-assessed their English language abilities by both assigning a letter grade reflecting their skills and also by determining a more general skill category (e.g., *beginning*, *intermediate*, and *advanced*). Participants' self-assessments of their English language ability revealed that they had moderate views of their English language skills (see Table 1).

**Instructor assessments.** It is perhaps not surprising given students' grades are determined by their instructors, that the letter grades assigned by instructors to reflect participants' English language abilities were in accord with those assigned by participants themselves.

## **Language Confidence**

Participants were asked to rate the confidence (using a 3-point Likert-type scale with 1 = low, 2 = medium, and  $3 = high \ confidence$ ) with which they currently spoke English. These self-assessments revealed one participant at a high level of speaking confidence, five participants at a medium level, and one participant at a low level. Their instructors reported three participants as being high in confidence and the remaining four participants as having medium speaking confidence (see Table 1).

Table 1
Self and Instructor Ratings of Language Ability, Confidence, and Comprehension

|   | Gra                | nde        | Confidence Level   |            | Language Ability   |              | Compre-<br>hension<br>in | Compre-<br>hension<br>Outside |
|---|--------------------|------------|--------------------|------------|--------------------|--------------|--------------------------|-------------------------------|
|   | <u>Participant</u> | Instructor | <u>Participant</u> | Instructor | <u>Participant</u> | Instructor   | <u>Session</u>           | Session Session               |
| 1 | C                  | В          | Medium             | High       | Intermediate       | Advanced     | 5                        | 4                             |
| 2 | В                  | В          | Medium             | High       | Intermediate       | Intermediate | 5                        | 4                             |
| 3 | В                  | C          | Low                | Medium     | Intermediate       | Intermediate | 4                        | 4                             |
| 4 | A                  | A          | High               | High       | Intermediate       | Advanced     | 5                        | 5                             |
| 5 | A                  | A          | Medium             | Medium     | Intermediate       | Advanced     | 5                        | 3                             |
| 6 | В                  | В          | Medium             | Medium     | Intermediate       | Intermediate | 5                        | 4                             |
| 7 | В                  | В          | Medium             | Medium     | Intermediate       | Intermediate | -                        | -                             |

## **Language Comprehension**

Participants were asked to use a 5 point Likert-type scale ranging from I = None of them to S = All of them to answer the prompt: "How much of the conversations that took place in B.A.R.K. did you understand?" On average, the participants answered S = All of them S = All o

#### **Self-Evaluations of Stress (see Appendix)**

Recognizing that the sample size is small, the following changes in pre-to-post self-assessments of stress are reported to merely demonstrate the direction of change across participants. A paired t-test indicated that, from pre-to-post-test across the five sessions, participants' self-assessed stress levels were significantly lower at the end of the study (M = 1.91, SD = 0.72) than at the beginning (M = 3.21, SD = 0.89), t(32) = 8.154, p < .001, d = 1.60. Participants' perceptions of stress dropped an average of 1.30 points (SD = 0.92, 95% CI [0.98, 1.63]) following participation in the five therapy sessions. Participants spent an average of 25 minutes in each session (SD = 11.39, range = 5 to 67 minutes). Length of time spent in a session had a small, but significant, influence on the amount of stress reduction that participants reported, F(1, 31) = 2.27, p < 001,  $R^2 = .068$ , standardized  $\beta = -0.26$ .



Table 2

## **Self-Evaluation of Engagement**

Participant attendance across the study was 94%. Over the five sessions, participants self-evaluated their engagement as  $Very \, Engaged \, (M=5.55, SD=1.00)$ . These findings were in contrast to the level of engagement identified by independent observers who identified the participants' engagement as  $Somewhat \, Engaged \, (M=4.58, SD=1.66)$ .

#### **Prevalent Themes from Individual Interviews**

Content analysis of participants' responses during their individual interviews in which they described their experience of participating in a canine therapy program on campus revealed a number of salient themes across participants (see Table 2). Thirteen themes emerged from the interviews and guided the development of questions used in the focus group.

Prevalent Themes Found Across Participant Interviews

|     | Theme                                   | Description   |  |  |  |
|-----|---|---|--|--|--|
| 1.  | Role of Dog Handler                     | Dog handlers were described as friendly, engaging, and encouraging.   |  |  |  |
| 2.  | Dogs as Social Catalysts                | Therapy dogs served to bring unfamiliar students together and provided a topic for discussion.  |  |  |  |
| 3.  | Lack of Participation in Other Programs | Participants reported not being involved in other campus programs.  |  |  |  |
| 4.  | Comforting Environment                  | Participants reported the environment was soothing, comforting, and relaxing.   |  |  |  |
| 5.  | Characteristics of Dogs                 | The dogs' personalities were engaging and made interactions easy.   |  |  |  |
| 6.  | Variety of Speakers                     | Given the number of people in the lab, there was a variety of people to speak to (e.g., adults, fellow students, staff).  |  |  |  |
| 7.  | Depth of Conversations                  | Because of the frequency of visits, there were opportunities to build on previous discussions beyond "How are you?"   |  |  |  |
| 8.  | Opportunities to Practice               | Interactions provided opportunities to not just listen to proficient speakers but to practice English with proficient language users.                             |  |  |  |
| 9.  | Knowledge of Canadian Society           | Interactions allowed participants insights into how Canadians treat, interact with, and value their pets.   |  |  |  |
| 10. | Community                               | The therapy sessions felt like a community. They brought together likeminded people with common interests.  |  |  |  |
| 11. | Continuity                              | Participants reported seeing the same people from one session to the next and that this continuity made them feel a part of the community and eased interactions. |  |  |  |
| 12. | Comprehension                           | Participation in the therapy sessions provided opportunities to listen to different speakers and to learn how language is used within a specific context.         |  |  |  |
| 13. | Challenged Language Skills              | Participants reported that they were exposed to new vocabulary and that this challenged their language skill development.   |  |  |  |

## **Focus Group Findings**

Questions asked in the focus group invited and encouraged participants to explore and share their thoughts, viewpoints, and experiences around three key themes: 1) Sense of Community; 2) Opportunities to Practice English; and 3) Stress. Focus group questions were thematically linked to these themes and participants' responses were recorded verbatim.

## **Climate of Therapy Sessions**

During individual interviews, the theme of a welcoming environment or climate within sessions was raised. To explore this more deeply, participants were asked: *Many of you mentioned how important the handlers were. What are words that describe the BARK handlers?* 

Participants' responses revealed that handlers did the following to create a welcoming environment (note: quotations are presented verbatim and the use of non-standard English, as used by participants, has not been corrected in order to preserve the voices of the participants):

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"Asked a lot of questions, helped me to openly share." (Participant # 1)
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"They were curious." (Participant # 2)
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"Calm, kind, gentle. They were nice to us. Easy to come here. They START conversations – I didn't have to be prepared." (Participant # 4)

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"Friendly, "Like family", it feels like home." (Participant # 7)
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To further understand the behaviour of the volunteer handlers' within sessions that helped to create a welcoming environment, the participants were asked *to describe what the handlers did to make them feel comfortable*. Participants responded that the handlers were engaging:

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"They initiated the conversations—I felt welcomed." (Participant # 2)
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"They smiled." (Participant # 3)
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"They were understanding—because of my level of English they explained in different ways if I didn't understand – it was easy to communicate with them." (Participant # 6)

When probed further about what the handlers did to encourage speaking and participation, participants responded:

"They made you want to ask questions about the dogs." (Participant # 3)

"They also tried to remember our faces! Where you from, what's your major? They remembered information about me! We could have conversations more deeply." (Participant # 5)

"Friendly approach, encouraging, they just started talking, carrying a conversation along." (Participant # 7)

Given the prominent role that the therapy dogs played in sessions, participants were asked to describe the dogs.

"It was a brand new experience for me—especially the close contact.

The dogs sensed this—they were sociable, friendly and interactive." (Participant # 1)

"Friendly, gentle, soft, cuddly, gorgeous." (Participant # 2)

"They were too calm and my image of a dog was that they were very active, jumping. Since I came here, I thought every dog is so calm and wants to be pet." (Participant # 6)

Last, participants were asked to share their views on what made the sessions feel like a community.

"Communities are characterized by culture so I'd say the BARK community has a culture of taking care of pets to reduce stress. It looks like a BARK family." (Participant # 3)

"This community was very friendly and warm and I stared at the cute dogs and the problems were just gone. It helped me a lot." (Participant # 5)

"When I heard the word community in general. I think closed. So when some stranger comes in, I feel like an outsider but here in BARK, I felt welcomed. Thank you for coming! I felt so happy because I felt so welcomed, like being at my house. It feels like when I visited my grandparents." (Participant #7)

## **Opportunities for Language Development**

The second theme emerging from participants' interview responses reflecting their experience in the canine therapy sessions revolved around the opportunities for language development that the sessions afforded. To explore this concept more deeply, participants in the focus group were asked: *Some of you raised the idea that being in the BARK program allowed you to speak to adults and to talk about different topics. Tell us about this.* Participants' responses revealed that the sessions provided ample opportunities to enrich their English language skills and to speak about topics not normally discussed.

"I usually don't talk to adults—I have no opportunity except for professors. It's really good to talk without thinking of girls and money – teenage stuff. We talked about other stuff—they were curious about me. They shared their EXPERIENCE - how they felt during travelling." (Participant # 2)

"We also talked about rescuing dogs. They talked about rescuing dogs." (Participant # 3)

"We talked about their families and who was in their family. We talked about blah, blah, blah and normally we don't get to talk about blah, blah, blah." (Participant # 5)

To explore more deeply the opportunities participants had to practice their English, participants were asked: *Many of you commented on how busy you were and that you did not participate in other extra-curricular clubs.* When you think of your average day on campus, do you get many opportunities to practice your English?



"I guess I normally do, I talk to profs, I even get on their nerves. I IMPOSE conversations on them." (Participant # 2)

"Roommates help practice English." (Participant # 4)

"I'm a smoker and the smoking Gazebo is a good place to practice English. Smoking isn't good for health but it's good for language!" (Participant # 6)

"We have projects in class that need discussions." (Participant #7)

To further understand the nature of the conversations that participants had in sessions, they were asked: Many of you indicated that participating in BARK provided an opportunity to practice your English. Did your conversations in BARK challenge your language skill level or challenge your vocabulary?

"Some handlers remembered me and as the program went on, we talked more deeply. I talked about my culture and we talked about travel stories. What I learned from their observations was the same as I understood—about my own country." (Participant # 3)

"It was beyond greeting. It was beyond "hi, how are you?" We talked about Iran climate conditions, they were curious about my government. I explained by best how the views of the government and religion. The handlers wanted to know the details of where I lived." (Participant #7)

#### **Stress**

Participants' responses during their individual interviews revealed that the theme of stress and stress reduction was at the forefront of their thinking and to explore this further, participants were asked: *Many of you indicated that interacting with the BARK dogs decreased your stress.* How did that work?

"Personally, I love dog and people doing what they love, decreases their stress. I felt happy." (Participant # 2)

"They like I don't know how to describe but they made me feel like with my family. They remembered me. I have three dogs and they reminded me that I have dogs. I noticed that Canadians consider their pets as family members. It made me think that my dogs are family members. This helped me reduce my stress." (Participant # 3)

"Their body temperature. How the body is fluffy, I can hear the heartbeat. It was really rare to feel the heartbeat and temperature in real life. To have contact—that released my stress. We think about surrounding information, walking in a crowd to not touch, and how to talk to them, I'm unconsciously and consciously thinking how to interact and I was free from that—free from the stress so that helped us to relieve our stress." (Participant # 5)

To explore the participants' perceptions of how stress impacts their ability to speak English, participants were asked: What do you understand about how stress affects your ability to speak English?

"I usually feel more stressed out when I talk to official speakers, official officers. I get babbling, pacing, my own style changed. If I feel calmed down, I have more focus and find my words." (Participant # 1)

"My language skills have developed since I came here. At the beginning of the semester I could not say what I wanted to say. At the end of the day I was so exhausted. I feel like my brain stopped working. In general, socializing in the smoking Gabezo was stressful at the beginning. Gradually, my English improved. The stress went down." (Participant # 6)

#### **Discussion**

It has been forecasted that the number of international students worldwide will increase from 2.1 million to 5.8 million between the years of 2003–2020 (Bohm et al., 2004). Canada, along with the United Kingdom, the United States, Australia, and New Zealand, is considered one of the key English speaking destinations sought after by EAL students (Bohm et al., 2004). Universities have an obligation to support both the academic growth and the social and emotional well-being of all their students, especially students such as EAL learners who are known to face challenges, oftentimes with little social support, in their adjustment to campus life and expectations and in their adaptation to the culture of a new country.

Recall that the aim of the current study was to explore the experiences of a small group of international EAL learners as they participated in an on-campus community program that saw therapy dogs brought to campus to support the social and emotional well-being of the broader student body. The findings of this study inform our understanding of how EAL learners in the post-secondary context might be supported in their pursuit of English language skills development and socialization or integration into the larger campus community. The salient findings of this study revealed that students perceived the canine therapy program in which they participated to be inviting and welcoming and that it provided opportunities both for stress reduction and to practice their English in an informal setting.

Across participants, participation in the canine therapy program was favourably viewed—that is, EAL learners reported enjoying coming to sessions and enjoying their interactions with community volunteer dog handlers, the dogs themselves, and fellow students. Though participants' were enthusiastic about participating in our program, they reported only participating in this program—despite ample additional programs being available across campus. This is in accord with findings by Hwang, Bennett, & Beauchemin (2014) who found that campus programs and counselling services tend to be underutilized by international students. Certainly, for this subsample of international EAL students, accessing structured programs that would provide opportunities to interact with more proficient English language speakers and to become integrated in campus life, was not the norm. One might speculate that it was perhaps the dogs themselves, a non-threatening, non-English speaking agent, that facilitated this participation. Recall that a total of 58 students were presented information about the study in their English

language development class and that almost half of these students (i.e., 45%) asked to be put on the list to be randomly chosen for inclusion in the study. As university and additional-language administrators seek ways to integrate EAL learners into their campus communities and to encourage students to avail themselves of the programs in place designed to support their wellbeing, might providing regular and routine access to therapy dogs facilitate this integration? Participation in such programs has implications for student satisfaction, engagement in campus life, and ultimately student retention.

Certainly, these benefits as identified by participants, provide support for the *affective filter hypothesis* of language acquisition (Krashen, 1982). Participants reported feeling a reduction in stress and moreover recognized that stress negatively impacted their ability to learn a new language. Participants also noted that the welcoming and relaxing atmosphere helped integrate them into conversations and that the conversations they had, provided opportunities for them to both speak with a variety of more proficient English language speakers and to discuss topics outside the purview of their typical conversations. These findings are in accord with findings in the AAT literature attesting to the role of canines as social "lubricants" or catalysts, connecting people to one another (McNicholas & Collis, 2000).

Findings from this exploratory study hold real-world teaching implications as educators seek novel ways to support students in their English language development. Though the approach undertaken here was to offer a program above and beyond regularly scheduled instruction, a hybrid approach whereby a therapy dog is introduced into a language class might facilitate social interactions and language development. Further, one insight gleaned from participants' responses revealed that they were largely reticent to participate in outside opportunities holding potential to enhance language learning (i.e., structured programs offered on campus). English development classes could be a good location to demystify both the programs that students might join and pathways to joining these groups as a means of enriching and reinforcing language learning outside of the immediate instructional context. Last, a common theme throughout many participants' responses revealed the importance of a warm and nurturing learning climate that helped encourage participation in the intervention. The importance of this climate is not to be understated and instructors seeking to create learning environments for students where students feel comfortable to take risks, to socialize and interact with one another to enhance their language skills, and to build rapport with their instructors, would be wise to devote ample time to creating such learning climates.

As with all empirical work, this study was not without limitations. A larger sample size, the use of pre-and-post measures of language ability, and an increase in the number of sessions offered to students would allow more definitive claims to be made of the benefits of canine therapy on the development of language. Though attempts were made to triangulate findings (e.g., through the use of self-reports, instructor reports, and research assistant observations), more focused efforts could have been made to more narrowly assess outcome variables, including language confidence, breadth of social network (including the number of domestic proficient English language speakers known pre-to-post), and language competencies. This would also include the use of a control group (or a business as usual non-treatment group) to allow more confident claims to be made in regards to the benefits on language development arising from exposure to therapy dogs. Certainly a further limitation of the study, in light of our

goal to investigate how AAT impacts language learners' affective filter, was not asking students more directly for their pre- and post-intervention self-assessments of their affective filters.

Despite these limitations, the findings arising from this exploratory study provide insights into the potential that canine therapy has to support both the well-being of international EAL learners and to provide opportunities for language skill development. Moving to a new country, attending a new post-secondary institution, learning a new language, and cultivating new friends and support networks are bold undertakings. Given the need to support EAL learners in their pursuit and mastery of an additional language combined with ample research attesting that to the benefits of canine therapy in reducing stress, additional research is warranted to investigate how canine therapy might be made available to EAL learners in an effort to reduce the affective filter impeding language acquisition.

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## **Appendix: Stress Scale**

| (VE)   | BARK  |   |   | TODAY'S DATE:  |   |                                  |  |
|--|---|---|---|--|---|----------------------------------|--|
|  | B.A.R.K. Dog Then<br>UBC Okanagan<br>EME 3173 - 1137 U<br>Kelowna, BC | .,  |   | P  | ARTICIPANT NUMBER   |                                  |  |
| confidential and you<br>at-risk or compromis<br>that allows us to eval | r name will not be a<br>ses your standing a<br>uate the number of     | ssociated with<br>s a student. Trac<br>students we're s | nt as an adult to parti-<br>your survey. Your con<br>kking who attends the<br>serving and to gauge h<br>n the scale where it ap | npletion of this su<br>B.A.R.K. Drop-In :<br>ow the drop-in fo | arvey in no way place<br>Sessions provides in<br>rmat impacts stude | tes you<br>formation<br>nts. ALL |  |
| FIRST TIM  | IE TO BARK? YE  | S I NO IFN  | O, HOW MANY TIMES T   | HIS YEAR HAVE YO   | U ATTENDED BARK?  |                                  |  |
| WHERE IS YOUR HOM<br>(WHERE DID YOU COME<br>UBCO?)                     |   | YEAR OF STUDY   | E   FEMALE   OTHER  f: 2   3   4   5+ grad   feculty  | TIME   |   |                                  |  |
| STRESS LEVEL  NOT AT ALL STRESSE                                       | WHEN YOU A  | 0   | NEUTRAL O   | SOMEWHAT ST  | RESSED VERY S   | STRESSED                         |  |
|  |   | ase fill out res  | t of survey after you   | Ur BARK sessioni   | u   | سىنى                             |  |
| STRESS LEVEL  NOT AT ALL STRESS  | L WHEN YOU I  | 0   | NEUTRAL O   | SOMEWHAT ST  | RESSED VERY   | STRESSED                         |  |
| How engaged were ye  | ou today?   |   | ×   |  |   |                                  |  |
| Fully<br>Disengaged  | Very<br>Disengaged<br>2   | Somewhat<br>Disengaged<br>3                             | Neither Engaged<br>Nor Disengaged<br>4  | Somewhat<br>Engaged<br>5                                       | Very<br>Engaged<br>6  | Fully<br>Engaged<br>7            |  |



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