



## Using Ambient Scent to Enhance Well-Being in Teaching Environment



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### Abstract

Emotional state can influence the dynamics of the learning environment. Both educators and parents need to acknowledge the integral role that emotions have in learning. Emotions are the embodied response to a stimulus. Phylogenetically, olfactory stimulation has unique relation with emotion. Hence, it is important to take the ambient smells surrounding us into consideration to enhance our “ Well-being”, which is defined as the combination of feeling good and functioning well; by experiencing positive emotions such as happiness and contentment as well as the development of one’s potential. It has been proven that aromatherapy using specific ambient scents is a positive tool in learning process affecting cognitive skills from one side and psychological condition for everyone involved. Aromatherapy is practiced via inhalation or topical application as a natural way of healing a person’s mind, body and soul. The practice will be depended on specific essential oils proven to have multiple aspects of neural and mental development, emitted from an aromatherapy burner - in both schools and homes- and continuously burned throughout the teaching period. Inhaling essential oils will stimulate the olfactory system. As the molecules would reach the brain, they will affect limbic system, which is linked to emotions, memory and stress, reflecting on the well- being of all who are involved in the learning process, building sustain and positive emotions of appreciation for the world around them.

**Keywords:** Aromatherapy; Learning; Emotions; Well-being.

## 1. Introduction

Smell memory is one of the strongest memory abilities that humans have. Using ambient scents to enhance well-being in the teaching environment is innovative as practice because it concentrates on the classroom and home environments; providing opportunities for children, teachers, and parents to connect with nature by potential effects of ambient diffused aromas of specific essential oils; emphasizing “well-being” for all.

Learning cannot happen independently of emotion. Early childhood is a critical stage of development for learning social and emotional skills. This being said, children may be vulnerable to emotional difficulties that hinder their academic achievements [1]. It is easy to identify a child’s physical needs. However, their mental and emotional needs may not be as noticeable. According to Stone-McCown, *et al.* [2] integrating emotional skills-related programs into the curriculum is an important solution for many teaching problems, taking into account the positive impact on both parental health behaviors, and teachers’ mindsets, which are also considered to be important psychological factors in the child’s development.

Aromatherapy is considered an emotional intervention, and it has been used in schools as part of the science programs in curricula, which involve responding to sensory stimuli. Knowing that olfactory stimuli may be effective in promoting the coding of learning process. According to The National Association for Holistic Aromatherapy (NAHA); the definition of “Aromatherapy” is “the therapeutic application or the medicinal use of aromatic substances (essential oils) for holistic healing”. This is based on its immediate impact on the sense of smell and inhaling essential oils, which stimulates the olfactory system. Molecules that enter the nose or mouth would pass to the lungs, and from there, to other parts of the body. As the molecules reach the brain, they affect the limbic system, which is linked to emotions, heart rate, blood pressure, breathing, memory, stress, and hormonal balance. This way, essential oils can have a subtle, yet holistic effect on the entire body. Hence, using essential oils, aromatherapy

recreates the environment of mesmerizing essence and fragrance that reflect on the psychological state of the mind [3].

Research within the field of aromatherapy emphasizes investigating the effect of different essential oils on precise brain centers known to regulate an individual's attention level during the teaching process [4]. According to [5] both parents and children reported feelings of calmness when essential oils were sprayed or diffused in the environment, and matching learning concepts with good scents could increase the efficiency of emotional learning in classroom.

The implementation of this practice, by using specific ambient scents in the teaching environment could support and develop childhood experiences and education, teachers, and parents who provide basic experience and opportunities to the child, impose an important role in the process, by creating the same atmosphere and pleasant memory. Education must assure that children and all involved in the teaching process have the essence of "well-being" by understanding its requirements, and the factors that influence this state, whether as an individual or community, to improve the quality of life.

This review explores the information available in the literature studies regarding effects of aromatherapy by using certain aromatic oils on all who involved in the learning journey as children, teachers and parents regardless of individual backgrounds, life experiences, or health challenges with acknowledging the remarkable healing properties of specific essential oils that have been studied and reported.

## **2. Methods**

This paper employs a narrative review as its methodology. This approach is used to summarize and evaluate articles from certain literature, and canonical texts are synthesized using narrative reviews of the relevant literature related to positive effects of aromatherapy on learning process in both schools and homes.

## **3. Results and Discussion**

Aromatherapy has been popularized over the past few years and it has been recognized as an easily accessible and affordable given natural procedure to treat stress or other negative feelings. To implement this practice, essential oils and diffusers in the classroom and homes are required to bring olfactory stimuli interventions to daily life to enhance well-being. Certain essential oils produce different effects depending on their usage. In the following highlighting on the effect of using specific ambient aroma on all involved in the learning journey from children to teachers along with parents according to many research.

### **3.1. Effects of Aromatherapy on All Involved in the Learning Journey**

#### **3.2. Effects of Ambient Scent on Learning Process of Children**

Children's emotional well-being reflects on success in life. According to Yuanguang [6] there is a variety of emotional experiences in the learning process, including happiness, calmness, anxiety, fear, and anger, which usually affect social behavior.

Knowing that, School can be stressful at any age. It was proved that aromatherapy could create psychological and emotional support and stress relief [7] which the children need in the learning environment to thrive and succeed in school, and beyond. It enriches the classroom as a space in which students feel safe and supported in their pursuit of knowledge.

Also, the essential oils (EOs) which are extracted from plants contain active components with therapeutic effects. Medical experts indicated that when the molecules reach the brain, they affect the limbic system, which is linked to emotions. Thus, scent can be used as a natural and subtle way to control the classroom environment, improve attention and focus, and keep behaviors at bay [8], that oxygen cells containing the fragrance molecules cross the blood- brain barrier, and are carried to the brain, stimulating various brain centers increasing attention levels. Kristin [4], cleared that eucalyptus and peppermint oils are predominately known for their ability to enhance an individual's level of attentiveness, resulting in an advance in the individual's ability to focus.

Furthermore, Enhancing memory is very important in the educational process that could assist the children. Moss, *et al.* [9], found that ambiently diffused aromas of rosemary essential oils had a positive effect on children's working memory performance. Also, according to [5] aromatherapy helps memory by harmonizing smell messages, incorporating the aroma of essential oils into the learning environment, or repeating lectures with smells

#### **3.3. Effects of Ambient Scent on Teachers**

The purpose of aromatherapy practice is to make the learning environment more than just a classroom, creating a safe space that feels welcoming for all. Exposing the children, along with teachers to specific vibrant aromas could create a supportive emotional learning environment, and boost positive emotions of appreciation for the world around them.

According to Narae, *et al.* [10], indoor environmental quality (IEQ) affects occupants' psychological and physiological responses, which can eventually lead to either an enhancement or a deterioration of individual well-being.

Using a diffuser is a productive way to disburse scent into the classroom. And the effects of this practice depend on the selection of the right aroma to reach the specific target. Lavender is commonly used for anxiety treatments as it calms the nervous system; its calming qualities have been proven to elevate moods and positively improve emotional states [11].

Moreover, teachers used to do various administrative duties. Therefore, they are at risk of suffering from work-related stress. According to Kuo [12] natural bergamot essential oil has an effect and the aromatherapy treatment relieves work-related stress of teachers with various workloads.

Also, Berman [13] indicated that aromatherapy could enhance the positive mood, physiological, and behavioral balance, and brings positive outcomes to the human body and mind. This could assist teachers in their work.

### 3.4. Effects of Ambient Scent on Parents

The effects of aromatherapy have caught attention in the education field, and this suggested practice is important because it takes into consideration everyone that shapes the learning circle of children, teachers, caregivers, and parents, enriching the surrounding environment with a pleasant aroma, building a sustained positive memory attached to teaching horizon.

At home, family stability and emotional balance of the parents has an effect on childhood care and education, using pleasant fragrances during teaching is a natural intervention that can indirectly control unwanted emotions. Knowing that parents need to be in a positive mood to transfer healthy emotions to their children. Yim, *et al.* [14] proved that inhalation approach, could be a potentially safe and effective strategy for managing emotions and alleviating the symptoms of physical and psychological stress. Promotion of better physical and mood, which provided comfort for mothers after using essential oil aromatherapy treatments [15] That could be helpful in building healthful Parent-child relations.

Matsunaga, *et al.* [16], suggested that odor-evoked autobiographic memory along with a positive feeling induces various physiological responses, including autonomic nervous and immune activities.

## 4. Conclusion

According to previous studies, using ambient scents in the teaching environment is a viable practice for both the classroom and at home. Taking into consideration the psychological side of the teaching process that facilitates the learning path. Aromatherapy has been proved to be active natural therapy, it can be a favorable intervention helping children breathe in some mental goodness, and supports teachers along with parents by relieving the symptoms of psychological stress.

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