Educating the (Weather) Educator: Weather Salience and Mindfulness Meditation as Useful Psychological Concepts for Use in SKYWARN™ Training Sessions

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SKYWARN™ storm spotter training sessions have been a staple service of the National Weather Service for many years. Historically, they have focused on physical meteorology and making people aware of the myriad hazards and observational features of storms as well as severe weather reporting procedures. They have not, however, much discussed psychological aspects of storm spotting. Our intention here is to make SKYWARN™ training facilitators more aware of certain concepts which, once known, might enhance the delivery of training sessions. For instance, the very act of spotting involves *weather salience*, or paying attention to weather.

Weather salience is multifaceted, involving not just basic attention to weather but also the contexts in which one pays attention. This might include, for example, the routine acquisition of forecast information in order to plan one's day, or checking the weather to remain or get ahead of evolving severe conditions. It also involves one's curiosity for weather information and weather science itself; the sensory aspects of being-in and desiring to experience different weather conditions; needing to think about weather; appreciating weather's aesthetics; and is associated with protective action and decision-making mechanisms. Knowing that SKYWARN™ attendees will possess differing levels of salience can help training facilitators individually tailor content.

Mindfulness meditation, on the other hand, may not work for everyone but can be presented as a tool useful to SKYWARN™ attendees for use in their storm observing and reporting activities. Mindfulness involves being clearly and nonjudgmentally aware of one's moment-to-moment thoughts and feelings. Regular practice of mindful breathing can help center attention and lower heart rate and blood pressure. Preliminary research of ours has even shown that it may be helpful in easing negative emotions induced by storm fear. We believe it can help to decrease panic in stressful storm observation moments and enhance clarity of thought for the reporting of storm features. Here are two simple techniques that may thus be helpful.

Present-moment awareness and centering attention. Pause for a moment and gently direct attention to your breathing while closing your eyes. Slowly breathe in through the nose and out through the mouth (using the nose or mouth exclusively works too if one or the other is difficult; the intentionality of noticing is most important to the process). Notice yourself breathing in and out. Repeat this a few times before extending awareness to your thoughts; alternate noticing your breath and bodily sensations, sound from your surroundings, and your thoughts. Try not to judge or evaluate your thoughts and simply let them pass through your mind. Continue this for anywhere from a few seconds to 2-3 minutes before opening your eyes.

Grounding in the moment. Pause for a moment. If sitting down, gently direct attention to your body making contact with the seat; if you are standing, direct your attention to notice your feet making contact with the ground. Set an intention to be present with *this moment* and notice your breathing alongside your chosen point of contact. Continue this process for as long as you would like or until you feel a sense of calm, and then return awareness to the world around you.

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