Does depth of field attract visual attention?

Across different photographic images and cinematic shots, depth of field often changes. Yet, there is little research to date which indicates the impact on visual attention of these differing depths of field. To determine the impact of depth of field type blur effects on attention, participants were eye-tracked whilst completing a visual search task within a series of natural scene images. To simulate depth of field, one half of each image was randomly selected to be blurred using a Gaussian kernel at one of three levels of intensity, to approximate the effects of different depths of field. The total length of fixation duration per participant was found to be significantly longer on the in-focus portion of each image. This suggests that artificially blurring a portion of an image directs visual attention away and towards what is in-focus. This has practical and theoretical implications for vision-related research, as well as fields such as cinematography and photography.