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Investigating the effectiveness of brief cognitive reappraisal training to reduce fear in adolescents

Tim Shore, Kathrin Cohen Kadosh, Miriam Lommen, Myra Cooper and Jennifer Y. F. Lau

Oxford Institute of Clinical Psychology Training, Isis Education Centre, Warneford Hospital, Headington, Oxford, UK; Department of Neuropsychology, Salford Royal NHS Foundation Trust, Salford, UK; Department of Experimental Psychology, University of Oxford, Oxford, UK; Department of Psychology, Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, UK

ABSTRACT
As adolescent anxiety is common and costly, identifying effective strategies to reduce symptoms is a priority. This study tested whether adolescents could learn to use cognitive reappraisal strategies to attenuate fear during extinction learning. Fifty-seven participants (12–15 years) viewed images of two neutral faces, one which was paired with a fearful expression and shrieking scream (conditioned threat stimulus) and the other that was never paired with the aversive outcome (conditioned safety stimulus) during fear acquisition. Before extinction, participants either received cognitive appraisal training, which explored alternative, benign meanings associated with the scream or a control activity. Self-reported fear ratings in the cognitive reappraisal group were significantly lower to both the conditioned threat and safety stimuli after extinction than the control group. These findings did not characterise fear-potentiated startle data. Potential reasons for the lack of consistency between measures are considered.

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Anxiety in adolescence is common and has lasting effects on adult well-being (Boden, Fergusson, & Horwood, 2007). While frontline psychological treatments such as cognitive behavioural therapy (CBT) for adolescent anxiety can be effective, for some individuals their effects may be suboptimal (James, James, Cowdrey, Soler, & Choke, 2013). A greater understanding of the components of CBT that bring about change could be important for developing more effective interventions. To address this need, our study will evaluate, in adolescents, the effectiveness of cognitive reappraisal, one component of adolescent CBT.

Experimental adult research shows that cognitive reappraisal strategies that encourages re-interpretation of a stimulus/situation can be taught in brief interventions and is a promising way of regulating negative affect measured using self-reported but also physiological and neural indices (e.g. Delgado, Nearing, Ledoux, & Phelps, 2008; Ochsner, Bunge, Gross, & Gabrieli, 2002; Ray, McRae, Ochsner, & Gross, 2010). Less is known about the effectiveness of cognitive reappraisal strategies in adolescence. Structural immaturity of prefrontal brain regions and their connections with subcortical areas – coupled with the unique psychosocial challenges of adolescence may place emotional regulation ability under strain compared to children and adults (Hare et al., 2008). Nonetheless, when presented with pictures of varying valence, adolescents like children can lower their negative affect (e.g. McRae et al., 2012). While these studies of adolescent cognitive reappraisal are informative, reappraisal abilities are usually probed in response to a static picture with limited personal salience. One exception is a study carried out by Platt et al. (2014) investigating reappraisal ability in response to peer rejection in depressed and non-depressed adolescents. However, assessing reappraisal differences to peer rejection may be somewhat
less relevant to adolescent anxiety. Instead using threat stimuli that evoke fear specifically may be more sensitive to reappraisal differences.

In the present study, we therefore assessed adolescent cognitive reappraisal abilities in the context of a fear-learning paradigm (Lau et al., 2008). This task paired a neutral stimulus (a female face) with an aversive outcome (a piercing scream) during an acquisition phase so that the conditioned threat stimulus (called the CS+) would come to elicit fear (over and beyond fear elicited by a cue never paired with the aversive outcome, the CS−). Some participants were then taught reappraisal strategies to reinterpret the personal meaning assigned to the CS+ while the other half performed a non-affective control task. After two reminder presentations of the face and scream (known as the reinstatement phase), participants viewed presentations of the CS+ and CS− without the scream (known as the extinction phase). We assessed whether adolescents who were taught to re-interpret acquired fear would show greater attenuation of fear during extinction. Consistent with an adult study (Shurick et al., 2012) upon which this study was based, we expected that adolescents who had received cognitive reappraisal training to exhibit lower fear after extinction. Fear was measured using self-report ratings and fear-potentiated startle (FPS). As conditioned fear in anxious participants may be particularly resistant to change, we also explored whether trait anxiety moderated the effectiveness of reappraisal training on fear reduction.

Methods

Participants

Fifty-seven participants aged 12–15 years (mean age = 13.53, SD = 0.88) were recruited from schools (n = 47) or an advert in a newsletter (n = 11). Sample size was based upon power calculations using findings of a large between-groups effect size (Cohen’s $d = 0.77$, $r = 0.36$) post-intervention from a similar study of young adults (Shurick et al., 2012). Assuming a similar effect size, a total sample of $n = 50$ was calculated to provide 87% power to detect significant between-group differences at $\alpha = 0.05$. While differences in recruitment strategies meant testing under different conditions (i.e. at school versus at the lab), all participants underwent the same experimental procedure. Moreover there were no significant differences in baseline fear ratings to task stimuli across these participants ($p > .59$). Recruitment source was also included as a covariate in analysis but this did not alter the pattern of differences associated with the intervention.

Because the presence of co-morbid conditions (e.g. depression) and treatment factors may confound the effects of reappraisal training, we excluded students known by the school or indicated by the parent to have a clinical history of anxiety or other mental health difficulties. To maximise the sample size, we did not impose any other exclusion criteria. The study was approved by the University of Oxford research ethics committee.

Procedure

Parental consent and participant assent were sought before starting study procedures. Participants first completed the State-Trait Anxiety Inventory for Children (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). This measure has high internal consistency and correlates well with other measures of anxiety (Muris, Merckelbach, Ollendick, King, & Bogie, 2002). Inclusion of this measure enabled us to assess and control for any existing anxiety-associated differences between intervention groups at baseline (state anxiety), as well as measuring the role of individual (trait) anxiety levels upon the effectiveness of the reappraisal intervention. Participants underwent a classical fear-learning paradigm delivered in two sections. The first section, comprising pre-acquisition and acquisition phases, was followed by a 10–15-minute period during which participants received either cognitive reappraisal training or an unrelated reading task. The second section of the paradigm, which comprised re-instatement and extinction phases, was then administered.

Assignment of participants into either group was done before meeting with a participant on a pseudo-random basis to enable an approximate equal gender split between groups. Although the experimenter (T.S.) was not blind to participant group status during testing, to minimise bias, fear ratings were completed by the participant under private conditions. Coding of EMG startle responses was done blind to group status. All participants received a book voucher.

Fear-learning paradigm

We used a modified version of the screaming lady discriminatory fear-learning paradigm (Lau et al., 2008) (Figure 1). During pre-acquisition, participants were
shown four presentations of each of two female neutral faces. During acquisition, one of the female faces was randomly selected to serve as the conditioned threat cue (CS+) such that it morphed (on 50% of trials) into a fearful expression and co-terminated with the unconditioned stimulus (UCS), a 95Db shrieking female scream. The other face was the conditioned safety cue (CS−) as it was never paired with the UCS. Assignment of faces to the CS+ or CS− was counter-balanced evenly across participants in each group. There were 7 reinforced CS+ trials, 7 unreinforced CS+ trials and 14 CS− trials. Re-instatement, formed of two consecutive reinforced CS+ trials were included to re-evoke the learnt fear and to avoid fear dropping to floor levels in extinction. Extinction comprised 10 trials of the CS+ and CS− but in the absence of the UCS. Within each phase, CS trials were presented in a pseudo-random order, with no more than three trials of the same type occurring consecutively. Thus for acquisition, our sequence of trials did not allow for three presentations of the reinforced CS+, nor three presentations of the non-reinforced CS+ or CS− trials to appear one after the other.

**Fear ratings**

Participants were prompted at each phase to indicate on a 10-point Likert-type scale (0 = not at all afraid, 9 = extremely afraid) the strength of their fear to the CS+ and CS−. Responses were typed on a computer keyboard.

**Fear-potentiated startle**

Electromyography (EMG) recordings of the eye-blink startle reflex were made with two 4 mm Ag–AgCl electrodes placed beneath the eye over the orbicularis oculi muscle, approximately 25 mm apart. A third electrode was placed on the tip of the nose and served as a baseline reference. EMG activity was recorded using a PSYLAB (version 7) measuring system (Contact Precision Instruments, UK), and sampled at 1000 Hz, with amplifier bandwidth set to 25–500 Hz. To elicit the fear-potentiated eye-blink response, a 40 ms air-puff startle probe of medical grade compressed air was delivered to the centre of the forehead through a polythene tube (2 m long, 32 mm inside diameter), affixed approximately 1 cm from the skin by way of a headpiece worn by the participant. Prior to testing, air pressure was adjusted individually for each participant. Pressure was set at the minimal level required to elicit reliable blinking on a test series of six successive startle probe presentations, a process that also allowed the startle reflex to habituate. During the task, startle probes were only delivered during acquisition and extinction on about 70% of the trials in each phase (20 during acquisition and 14 during extinction). On these probed trials, the air puff was delivered 4 or 5 s after CS onset.

EMG data were rectified and smoothed using 20 ms moving window averages. The onset latency window for the blink reflex was 10–100 ms following startle probe onset. All trials in which blinks began before or after this window were discarded, as these blinks were not deemed to represent genuine startle responses to the air-puff probe. Trials which suggested excessive background noise interference were also discarded. Peak blink amplitude within 150 ms of startle probe onset was determined. The mean EMG level for the 50 ms preceding the onset latency window served as a baseline figure, which was then subtracted from the peak amplitude to generate the critical outcome measure for each trial. The mean blink amplitude across trials was calculated for each participant, giving two overall values for acquisition (towards CS+ and CS−) and two for extinction (towards CS+ and CS−).

Raw eye-blink data were standardised into T-scores to reduce between-subject variability. Participants who had valid blinks for fewer than 66% of trials (14)
Reappraisal training

The purpose of the training was to diminish conditioned fear through reappraisal of the threatening nature of the UCS. A theme that emerged during a pilot with two volunteer adolescents was that changing their understanding of why the lady was screaming was thought useful in modifying their initial emotional response. Thus, the actual script (see Appendix) involved re-interpreting the meaning of the UCS.

Participants were first introduced to the inter-relationship between thoughts, feelings, bodily sensations and behaviour through a cartoon picture designed for a child CBT programme (Kendall & Heddle, 2006). It was emphasised to participants that by learning to alter their interpretation of a situation, they could impact their emotional experience. Participants then discussed their thoughts, feelings and responses towards the UCS. It was suggested that holding different thoughts about the screaming lady in the fear conditioning task could influence fear or anxiety experienced by participants. Participants were encouraged to generate ideas as to why the lady might have a fearful expression and be screaming. If participants struggled, the experimenter provided suggestions (e.g. the lady might be excited at being on a rollercoaster) or they were guided to reappraise the screaming lady by changing the assumption that it represented a real person (e.g. the noise of the scream could be created by a computer/actor). Participants were encouraged to think they had the resources control their experience of the experiment by choosing a less threatening way to interpret it. To represent the collaborative nature of therapy, efforts were made to individually tailor the precise content of the reappraisal. The aim was to respond to what was most salient for each participant through screening questions at the start of the intervention on participants’ thoughts and feelings towards the UCS.

Control task

Participants assigned to the extinction-only condition were asked to read an extract from an age-appropriate short story (see Appendix). The extract was chosen on the basis of being unlikely to elicit significant emotion in the reader to avoid influencing performance during extinction. To support attention to the task, participants were told they would be given several questions related to the text when they had finished reading. Administration of an unrelated task to the control group was to engage participants for approximately the same amount of time as those receiving reappraisal training.

Results

Table 1 presents the demographic characteristics of study participants. The two groups did not differ on age, $p = .20$, gender, $p = .88$, state anxiety, $p = .46$ or trait anxiety $p = .24$.

Fear ratings

A $4 \times 2 \times 2$ mixed ANOVA with phase (pre-acquisition, acquisition, reinstatement, extinction) and stimulus (CS+, CS−) as within-subject factors and group (intervention, control) as the between-subject factor was conducted on fear ratings (Table 1). As a significant three-way interaction between phase, stimulus and group emerged, $F(3, 168) = 4.66; p < .01$, we compared the group differences in fear to each stimulus separately for each phase. For pre-acquisition, there were no main or interaction effects of stimulus nor group (all $p$'s > .21). For acquisition, there was a main effect of stimulus only, $F(2, 55) = 45.62; p < .001$, such that higher fear emerged to the CS+ compared to the CS−. Reinstatement fear ratings yielded significant main effects of stimulus, $F(1, 56) = 50.72; p < .001$ and group, $F(1, 56) = 7.74; p < .01$ as well as their interaction, $F(1, 55) = 7.64; p < .001$. The main effect of stimulus arose because both groups reported more fear to the CS+ than the CS− while the main effect of group arose because the control group reported more fear than the intervention group to both stimuli. The interaction between group and stimulus was driven by a significant difference between groups for the CS+ only ($t(55) = 3.47; p < .05$). For extinction fear ratings, a significant main effect of stimulus, $F(1, 55) = 49.35; p < .001$ and group $F(1, 55) = 14.68; p < .001$ and a significant group-by-stimulus interaction, $F(1, 55) = 8.64; p < .001$ emerged. Main effects were similar to reinstatement data but the interaction was explained by a larger group difference for the CS+,$t(56) = 3.47; p < .01$; Cohen’s $d = 1.07$ than for the CS−, $t(55) = 2.09; p < .05$; Cohen’s
These analyses were repeated separately with gender, age group and trait anxiety (created by a median split of anxiety scores) as additional between-subject factors. None of these factors moderated the three-way interaction between phase, stimulus and group. Nor were there main effects or interactions involving these variables.

As we were interested in the effect of reappraisal training on extinction learning specifically rather than general reappraisal-associated differences between the groups during extinction, we followed up the group difference (that was driven by responses to the CS+) at reinstatement. We created difference scores on fear ratings between reinstatement and extinction to the CS+ and CS− and compared this across groups. This continued to be significant, \( F(1, 56) = 7.46; p < .01 \) suggesting that reappraisal training lowers fear ratings generally (as indexed by group differences during reinstatement) but attenuates fear during extinction more specifically (as indexed by significant group differences at extinction taking into account differences at reinstatement).

### Fear-potentiated startle

A 2 × 2 × 2 group-stimulus-by-phase mixed ANOVA on FPS (Table 1) showed only main effects of stimulus and group \( F(1, 41) = 4.20; p = .047 \) and \( F(1, 41) = 4.55; p = .039 \). For stimulus, the startle reflex was greater towards the CS+ than the CS−. The group effect arose from an unexpected decreased startle reflex in the control group across both phases. Inclusion of gender as an additional between-subject factor revealed a significant gender main effect \( F(1, 39) = 5.95; p = .019 \) modified by a gender-by-phase interaction \( F(1, 39) = 4.35; p = .044 \). Females experienced no change in startle response from acquisition to extinction, whereas for males, a significant decrease was observed \( t(16) = 2.46; p = .03 \).

### Fear ratings and FPS relationship

No significant correlations were found between reduction of fear to the CS+ (versus CS−) from acquisition to extinction between self-reported fear and FPS.

### Discussion

This study investigated adolescents’ ability to learn cognitive reappraisal skills and whether this strategy could attenuate conditioned fear during extinction. Compared to the control group, the intervention group reported less fear to the CS+, an effect that generalised to the CS− (safety stimulus) at extinction. This effect could not be explained by more general fear-reduction effects of re-appraisal training as significant group differences to the CS+ and CS− remained after considering group differences during reinstatement after training. FPS data showed no intervention-group-by-phase-by-stimulus interaction but responses were unexpectedly lower in the control relative to the
intervention group. Trait anxiety did not moderate the effects of reappraisal training.

Our data thus showed that reappraisal training in adolescents was only effective when using self-reported fear. There are several explanations. Firstly, weak correlations between participant responses on the self-report and physiological measures used may indicate that reappraisal training does have an effect but that these effects occur on these different indices at different rates. Previous research investigating conditioning and extinction effects in children have highlighted inconsistencies between subjective ratings and skin conductance responses (Waters, Henry, & Neumann, 2009). Moreover as participants only received a brief intervention, changes in self-report scores may reflect an initial process of questioning automatic thoughts that manifests at an explicit self-report level only. Significant changes in physiological responses may be more gradual and reliant upon repeated practice of reappraisal techniques. However, this account does not explain why in adults, reappraisal training has almost immediate effects on psychophysiological measures (e.g. Delgado et al., 2008). It is possible that the discrepancy between measures in adolescents may relate to immature cognitive reappraisal abilities and/or blunted fear extinction (Hare, D’Onfro, Hammack, & Falls, 2012). Given this, it may be that more intensive training is needed to observe changes beyond self-report measures.

The second possibility is that reappraisal training was only apparent on startling scores during early phases of extinction, whereas we collapsed early and late phases. However, as there were only 20 trials during extinction (10 CS+ and 10 CS−) and not all contained startle probes, dividing further into early and late phases of extinction would have left too few trials to form a reliable index. A third possibility is that reappraisal training was ineffective and that the positive benefits on self-reported fear reflected demand effects. Although the purpose of the experiment was not revealed to participants, the intervention encouraged participants to use reappraisal to reduce fear towards the conditioned stimuli. Thus, participants may have sought to comply with what they perceived to be expected of them by reporting lower fear after the intervention. Why might reappraisal training not work any better than control training? The absence of main effects of trait anxiety on self-reported fear or startling measures may suggest that the fear learning and extinction task was not particularly sensitive to individual differences in anxiety and fear, and therefore less suitable to assessing the effects of reappraisal training designed to attenuate these responses.

A number of additional limitations need to be recognised. We have already discussed demand effects associated with social desirability to fulfil the expectations of the experimenter. Future studies should control for participant responses on social desirability measures. The benefits of reappraisal training could also stem from non-specific factors associated with the intervention, for example, a supportive and engaging social interaction with the experimenter, which were absent in the control group. Future research could clarify the contribution of therapist effects by including alternate control conditions (e.g. one where participants discuss responses to the CS+ but without reappraisal skills, or reappraisal training delivered in computerised format). A scale to measure the need for social interaction could also be included and controlled. Finally, we did not screen for diagnosed mental health difficulties but rather relied on exclusion by parents/teachers. This may have resulted in unmeasured differences in the presence of internalising disorders in one group over the other, and affected intervention group effects even though there were no state and trait anxiety group differences.

This study aimed to evaluate the effectiveness of brief reappraisal training and whether it facilitated extinction learning in community adolescents. Using self-reports, this age group appeared to benefit from reappraisal techniques. If measures of self-reported fear are valid, this finding is important, as the capability of adolescents to employ conceptual emotion regulation strategies such as cognitive reappraisal has direct implications for CBT adolescent models. Given the need for better targeted treatment of anxiety in adolescence (James et al., 2013), it provides justification for more in-depth research involving reappraisal training with clinically anxious samples, and whether there are potential merits of reappraisal at facilitating cognitive change relative to other techniques in this age group.

**Disclosure statement**

No potential conflict of interest was reported by the authors.

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References


Appendix

Script used by experimenter as basis for cognitive training intervention

Initial screening section

What were your thoughts/emotional responses when you first heard the dark haired/red haired lady scream?

Did you feel differently towards the dark haired lady compared with the redhead? Why do you think this was?

Did you find yourself thinking why the lady might be screaming?

When/How often did you think you were going to hear the scream? Did it feel outside of your control?

What made you feel the most shocked/anxious/fearful, etc?

Thank you. In a short time, I am going to get you to repeat a similar experiment. Before we do this, however, we are going to talk through some of the answers you have just given and think together about a plan to help change how you feel about the images you will see again.

Re-appraisal

Let’s focus on some of the thoughts you have just mentioned, as those seem really important for understanding the feelings you reported during the experiment [self-report scores].

Something a lot of people do not realise is that our thoughts and feelings are really closely connected. In the world, we are surrounded by many different sights, sounds and smells, and our minds automatically try to help us to interpret what these all mean.

Without even realising it, we are interpreting and giving our own meanings to everything happening around us. Let’s look at an example of this: Present cats/dog cartoon [designed to illustrate how different interpretations of a situation lead to differing emotional responses]. The black cat sees the dog asleep and is most likely afraid of the dog. His back is arched and he looks tense and frightened because he thinks the dog is big and scary and that he is in danger. The other cat with the stripes sees the same dog, but does not seem afraid. This cat is sitting down and looks calm and relaxed because he thinks the dog is friendly and he is safe. While both cats are in the same situation and see the same dog, they have
very different thoughts about the same dog, which influences their feelings.

So we experience an event taking place – we attach a meaning to that event – this then leads to an emotion. … we might decide that something is pleasant or nasty, good or bad, dangerous or safe, all based on how we have interpreted it …

In your case, you experienced seeing and hearing an image of a lady scream – you thought the lady was in danger/distress [or insert applicable interpretation for that participant] – and as a result you felt fearful/scared/tense, etc.

We are all different and like the two cats in the picture, we are capable of interpreting situations differently. So if you had a different thought about the lady, you may not have felt so fearful/scared/tense, etc.

Often our thoughts about something are automatic – they happen without us really knowing and we quickly feel an emotion – so it can be difficult to change these thoughts …

However, let’s try to think together about how we can think about the scream differently. Can you think of any ideas?

An alternative meaning might be that this lady is enjoying herself because she is at the fairground on a rollercoaster or is watching her favourite pop band at a concert … Her face is screaming because she is really excited.

Would it be helpful to think about the scream in this way? Would this lead you to feeling a different emotion in response to it?

Can you come up with any other ideas for thinking about the scream differently? If difficult for participant to generate ideas or to accept suggestion of lady enjoying herself:

It might help you instead to think about the sound of the scream and the image of the face separately. This might help prevent you from creating meanings about the lady being distressed or in danger.

So, rather than a human scream, we could think about this as a loud noise created by a computer. We could also think about the image of the lady as being an actress who has been asked to act like she is screaming. It might help you to think therefore that this is not a real person screaming.

Increasing perception of control

Sometimes when people feel anxious it is because they believe that events are outside of their control.

[Establish whether particularly relevant for participant based on screening questions]

In your case, when you saw the dark haired/red haired lady you might not have known when she was going to scream – it may have felt that you had no control over the situation?

This situation may have felt like it was difficult to manage your anxiety? [or insert feelings described by participant].

Often in life, something unexpected might happen to make us feel anxious or frightened. However, what we can do in these situations is realise we have the power to feel less anxious by thinking about what we see and hear in a less threatening way …

In a short time, we are going to repeat a similar experiment. You are not likely to know exactly when you might experience the lady screaming, but perhaps knowing this is not that important – perhaps what is most important is to use what you have learnt to think even though the scream may have seemed scary at first, it is only an image/sound on a computer screen and therefore cannot hurt me.

This might help you to feel calmer and realise the situation is not as hard as previously thought … Even if something is uncertain and we do not know what will happen, we can still feel in control of what is happening to us and how we are feeling.

Remember feeling shocked/anxious/afraid is a normal reaction, but by changing how we think about things there is usually something we can do to help us feel these things less strongly: “when something scares me, there is always something I can do to help me feel less afraid”.

Control reading task (extract taken from ‘The Landlady’ by Roald Dahl)

Billy Weaver had travelled down from London on the slow afternoon train, with a change at Swindon on the way, and by the time he got to Bath it was about nine o’clock in the evening and the moon was coming up out of a clear starry sky over the houses opposite the station entrance. But the air was deadly cold and the wind was like a flat blade of ice on his cheeks.

“Excuse me”, he said, “but is there a fairly cheap hotel not too far away from here?”

“Try the Bell and Dragon”, the porter answered, pointing down the road. “They might take you in. It’s about a quarter of a mile along on the other side”.

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Increasing perception of control

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Billy thanked him and picked up his suitcase and set out to walk the quarter-mile to the Bell and Dragon. He had never been to Bath before. He did not know anyone who lived there. But Mr Greenslade at the Head Office in London had told him it was a splendid city. "Find your ownlodgings", he had said, "and then go along and report to the Branch Manager as soon as you’ve got yourself settled".

Billy was 17 years old. He was wearing a new navy-blue overcoat, a new brown trilby hat and a new brown suit, and he was feeling fine. He walked briskly down the street. He was trying to do everything briskly these days. Briskness, he had decided, was the one common characteristic of all successful businessmen. The big shots up at Head Office were absolutely fantastically brisk all the time. They were amazing.

There were no shops on this wide street that he was walking along, only a line of tall houses on each side, all of them identical. They had porches and pillars and four or five steps going up to their front doors, and it was obvious that once upon a time they had been very swanky residences. But now, even in the darkness, he could see that the paint was peeling from the woodwork on their doors and windows, and that the handsome white facades were cracked and blotchy from neglect.

Suddenly, in a downstairs window that was brightly illuminated by a street-lamp and not six yards away, Billy caught sight of a printed notice propped up against the glass in one of the upper panes. It said BED AND BREAKFAST. There was a vase of flowers, tall and beautiful, standing just underneath the notice.

He stopped walking. He moved a bit closer. Green curtains (some sort of velvety material) were hanging down on either side of the window. He went right up and peered through the glass into the room, and the first thing he saw was a bright fire burning in the hearth. On the carpet in front of the fire, a pretty little dachshund was curled up asleep with its nose tucked into its belly. The room itself, so far as he could see in the half-darkness, was filled with pleasant furniture. There was a baby-grand piano and a big sofa and several plump armchairs; and in the corner he spotted a large parrot in a cage. Animals were usually a good sign in a place like this, Billy told himself; and all in all, it looked to him as though it would be a pretty decent house to stay in. Certainly it would be more comfortable than The Bell and Dragon.

On the other hand, a pub would be more congenial than a boarding house. There would be beer and darts in the evening, and lots of people to talk to, and it would probably be a good bit cheaper too. He had stayed a couple of nights in a pub once before and he had liked it. He had never stayed in any boarding houses, and, to be perfectly honest, he was a tiny bit frightened of them. The name itself conjured up images of watery cabbage, strict landladies, and a powerful smell of kippers in the living-room.

After dithering about like this in the cold for two or three minutes, Billy decided that he would walk on and take a look at The Bell and Dragon before making up his mind. He turned to go.

And now a strange thing happened to him. He was in the act of stepping back and turning away from the window when all at once his eye was caught and held in the most peculiar manner by the small notice that was there. BED AND BREAKFAST, it said. BED AND BREAKFAST, BED AND BREAKFAST, BED AND BREAKFAST. Each word was like a large black eye staring at him through the glass, holding him, compelling him, forcing him to stay where he was and not to walk away from that house, and the next thing he knew, he was actually moving across from the window to the front door of the house, climbing the steps that led up to it, and reaching for the bell.

He pressed the bell. Far away in a back room he heard it ringing, and then at once – it must have been at once because he had not even had time to take his finger from the bell button – the door swung open and a woman was standing there.

Normally you ring the bell and you have at least a half-minute’s wait before the door opens. But this dame was like a jack-in-the-box. He pressed the bell – and out she popped! It made him jump.

She was about 45 or 50 years old, and the moment she saw him, she gave him a warm welcoming smile. “Please come in”, she said pleasantly. She stepped aside, holding the door wide open, and Billy found himself automatically starting forward into the house. The compulsion or, more accurately, the desire to follow after her into that house was extraordinarily strong.

“I saw the notice in the window”, he said, holding himself back.

“Yes, I know.”

“I was wondering about a room”.

“It’s all ready for you my dear”, she said. She had a round pink face and very gentle blue eyes.

“I was on my way to The Bell and Dragon”, Billy told her. “But the notice in your window just happened to catch my eye.”
“My dear boy”, she said, “why don’t you come in out of the cold?”
“How much do you charge?”
“Five and sixpence a night, including breakfast.”
It was fantastically cheap. It was less than half of what he had been willing to pay.
“If that is too much”, she added, “then perhaps I can reduce it just a tiny bit. Do you desire an egg for breakfast? Eggs are expensive at the moment. It would be sixpence less without the egg”.
“Five and sixpence is fine”, he answered. “I should like very much to stay here”. 
“I knew you would. Do come in”. She seemed terribly nice. She looked exactly like the mother of one’s best school friend welcoming one into the house to stay for Christmas holidays. Billy took off his hat and stepped over the threshold.
“Just hang it there”, she said, “and let me help you with your coat”. There were no other hats or coats in the hall. There were no umbrellas, no walking-sticks – nothing. “We have it all to ourselves”, she said, smiling at him over her shoulder as she led the way upstairs. “You see, it isn’t very often I have the pleasure of taking a visitor into my little nest”.
The old girl is slightly dotty, Billy told himself. But at five and sixpence a night, who gives a damn about that? “I should’ve thought you’d be simply swamped with applicants”, he said politely. “Ah, yes.”
“But I’m always ready. Everything is always ready day and night in this house just on the off chance that an acceptable young gentleman will come along. And it is such a pleasure, my dear, such a very great pleasure when now and again I open the door and I see someone standing there who is just exactly right”. She was half-way up the stairs, and she paused with one hand on the stair-rail, turning her head and smiling down at him with pale lips. “Like you”, she added, and her blue eyes travelled slowly all the way down the length of Billy’s body, to his feet, and then up again.
On the first-floor landing she said to him, “This floor is mine”.
They climbed up a second flight. “And this one is all yours”, she said. “Here’s your room. I do hope you’ll like it”. She took him into a small but charming front bedroom, switching on the light as she went in. “The morning sun comes right in the window, Mr Perkins. It is Mr Perkins, isn’t it?” “No”, he said. “It’s Weaver”.
“Mr Weaver. How nice. I’ve put a water-bottle between the sheets to air them out, Mr Weaver. It’s such a comfort to have a hot water-bottle in a strange bed with clean sheets, don’t you agree? And you may light the gas fire at any time if you feel chilly”.
“Thank you”, Billy said. “Thank you ever so much”. He noticed that the bedspread had been taken off the bed, and that the bedclothes had been neatly turned back on one side, all ready for someone to get in. “I’m so glad you appeared”, she said, looking earnestly into his face. “I was beginning to get worried”.
“That’s all right”, Billy answered brightly. “You mustn’t worry about me”. He put his suitcase on the chair and started to open it.

Control reading task questions
What is the name of the young man in the story?
What is he looking for when he arrives in Bath?
What time period do you think this story might be set in?
What do you think might happen next in the story?