# Project Mindfulness - Source Code Part One

April 8, 2021

```python
[3]: # importing necessary libraries
import numpy as np, pandas as pd, seaborn as sns, matplotlib.pyplot as plt

#reading-in target dataset
df = pd.read_csv('/home/wobbalinux/Desktop/Potential Projects/Kentucky␣
 ↪Inventory of Mindfulness Skills Responses/data.csv')


# FUNCTION : preparing for reversed scoring of specific items
# according to the KIMS scoring instructions
def reverse_score(num):
        if num == int(1):
            return int(5)
        if num == int(2):
            return int(4)
        if num == int(3):
            return int(3)
        if num == int(4):
            return int(2)
        if num == int(5):
            return int(1)
```

```
# FUNCTION EXECUTION : reverse scoring of specified KIMS items
df['Q3'] = df['Q3'].apply(reverse_score)
df['Q4'] = df['Q4'].apply(reverse_score)
df['Q8'] = df['Q8'].apply(reverse_score)
df['Q11'] = df['Q11'].apply(reverse_score)
df['Q12'] = df['Q12'].apply(reverse_score)
df['Q14'] = df['Q14'].apply(reverse_score)
df['Q16'] = df['Q16'].apply(reverse_score)
df['Q18'] = df['Q18'].apply(reverse_score)
df['Q20'] = df['Q20'].apply(reverse_score)
df['Q22'] = df['Q22'].apply(reverse_score)
df['Q23'] = df['Q23'].apply(reverse_score)
df['Q24'] = df['Q24'].apply(reverse_score)
df['Q27'] = df['Q27'].apply(reverse_score)
df['Q28'] = df['Q28'].apply(reverse_score)
df['Q31'] = df['Q31'].apply(reverse_score)
df['Q32'] = df['Q32'].apply(reverse_score)
df['Q35'] = df['Q35'].apply(reverse_score)
df['Q36'] = df['Q36'].apply(reverse_score)


# isolating assessment questions
# NOTE : this data frame has maintained the performed reversed scoring
questions = df.
 ↪drop(['observing','describing','accepting','acting','age','gender'],axis=1)


# FUNCTION : preparing to replace our numerical scoring with labeled scoring
def label_score(num):
        if num == int(1):
            return 'Never or very rarely true (1)'
        if num == int(2):
            return 'Rarely true (2)'
        if num == int(3):
            return 'Sometimes true (3)'
        if num == int(4):
            return 'Often true (4)'
        if num == int(5):
            return 'Very often or always true (5)'


# FUNCTION EXECUTION : replace numerical scoring with labeled scoring
questions = questions.applymap(label_score)
```
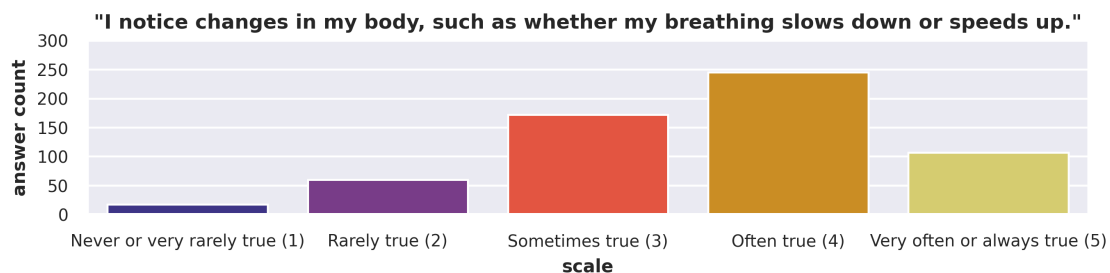
[22]:
```
# OBSERVE SUBSCALE - Question 1

plt.figure(figsize=(9,1.6),dpi=350)
```

```
sns.set(style='darkgrid')
sns.countplot(x='Q1',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
                'Rarely true (2)','Sometimes true (3)','Often true (4)','Very␣
 ↪often or always true (5)'])
plt.title('"I notice changes in my body, such as whether my breathing slows␣
 ↪down or speeds up."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob1',bbox_inches='tight')
```



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[23]:  # DESCRIBE SUBSCALE - Question 2

       plt.figure(figsize=(9,1.6),dpi=350)
       sns.set(style='darkgrid')
       sns.countplot(x='Q2',data=questions,palette='CMRmap',order=['Never or very␣
        ↪rarely true (1)',
                       'Rarely true (2)','Sometimes true (3)','Often true (4)','Very␣
        ↪often or always true (5)'])
       plt.title('"I'm good at finding the words to describe my feelings."',
               size=10,fontweight='bold')
       plt.xlabel('scale',size=9,fontweight='bold')
       plt.ylabel('answer count',size=9,fontweight='bold')
       plt.yticks([0,50,100,150,200,250,300])
       plt.tick_params(axis='both', which='major', labelsize=8.3)
       plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
        ↪Mindfulness Skills Responses/All Item Visuals/Ob2',bbox_inches='tight')
```
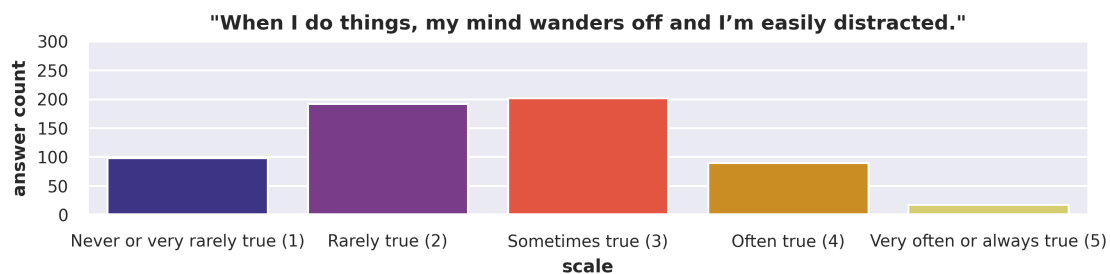
**"I'm good at finding the words to describe my feelings."**

*(bar chart with x-axis "scale" and y-axis "answer count" showing values for: Never or very rarely true (1), Rarely true (2), Sometimes true (3), Often true (4), Very often or always true (5))*

[24]:
```python
# ACT WITH AWARENESS SUBSCALE - Question 3

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q3',data=questions,palette='CMRmap',order=['Never or very
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often
 ↪or always true (5)'])
plt.title('"When I do things, my mind wanders off and I'm easily distracted."',
          size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of
 ↪Mindfulness Skills Responses/All Item Visuals/Ob3',bbox_inches='tight')
```

**"When I do things, my mind wanders off and I'm easily distracted."**

*(bar chart with x-axis "scale" and y-axis "answer count" showing values for: Never or very rarely true (1), Rarely true (2), Sometimes true (3), Often true (4), Very often or always true (5))*

[25]:
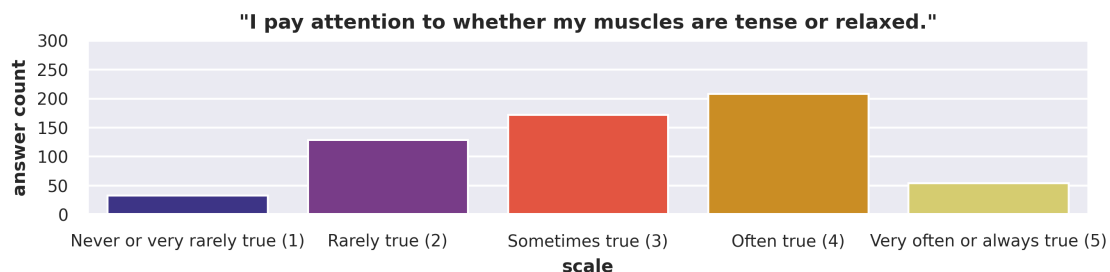```python
# ACCEPT WITHOUT JUDGMENT SUBSCALE - Question 4

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q4',data=questions,palette='CMRmap',order=['Never or very
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often
 ↪or always true (5)'])
```

```
plt.title('"I criticize myself for having irrational or inappropriate emotions.
 ↪"',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of
 ↪Mindfulness Skills Responses/All Item Visuals/Ob4',bbox_inches='tight')
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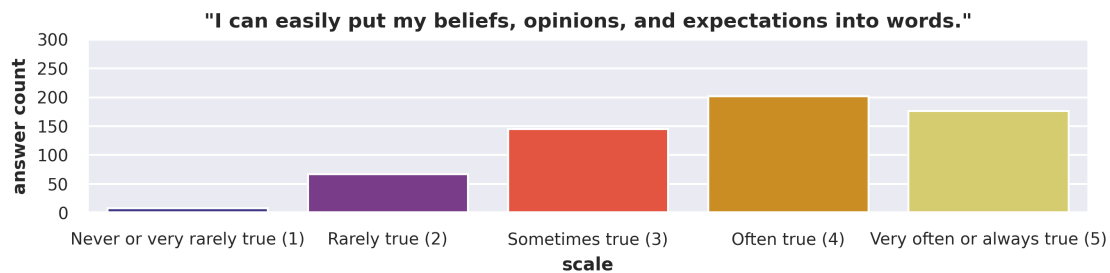


"I criticize myself for having irrational or inappropriate emotions."

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[26]:  # OBSERVE SUBSCALE - Question 5

       plt.figure(figsize=(9,1.6),dpi=350)
       sns.set(style='darkgrid')
       sns.countplot(x='Q5',data=questions,palette='CMRmap',order=['Never or very
        ↪rarely true (1)',
               'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often
        ↪or always true (5)'])
       plt.title('"I pay attention to whether my muscles are tense or relaxed."',
               size=10,fontweight='bold')
       plt.xlabel('scale',size=9,fontweight='bold')
       plt.ylabel('answer count',size=9,fontweight='bold')
       plt.yticks([0,50,100,150,200,250,300])
       plt.tick_params(axis='both', which='major', labelsize=8.3)
       plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of
        ↪Mindfulness Skills Responses/All Item Visuals/Ob5',bbox_inches='tight')
```



"I pay attention to whether my muscles are tense or relaxed."

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[29]:  # DESCRIBE SUBSCALE - Question 6

       plt.figure(figsize=(9,1.6),dpi=350)
       sns.set(style='darkgrid')
       sns.countplot(x='Q6',data=questions,palette='CMRmap',order=['Never or very␣
        ↪rarely true (1)',
                   'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
        ↪or always true (5)'])
       plt.title('"I can easily put my beliefs, opinions, and expectations into words.␣
        ↪"',
               size=10,fontweight='bold')
       plt.xlabel('scale',size=9,fontweight='bold')
       plt.ylabel('answer count',size=9,fontweight='bold')
       plt.yticks([0,50,100,150,200,250,300])
       plt.tick_params(axis='both', which='major',labelsize=8.3)
       plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
        ↪Mindfulness Skills Responses/All Item Visuals/Ob6',bbox_inches='tight')
```
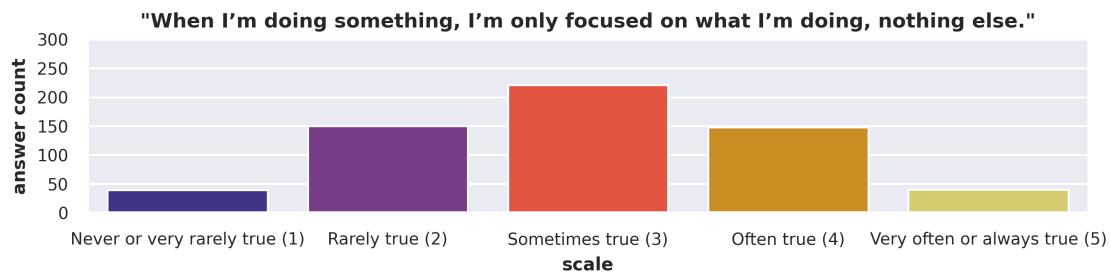


"I can easily put my beliefs, opinions, and expectations into words."

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[30]:  # ACT WITH AWARENESS SUBSCALE - Question 7

       plt.figure(figsize=(9,1.6),dpi=350)
       sns.set(style='darkgrid')
       sns.countplot(x='Q7',data=questions,palette='CMRmap',order=['Never or very␣
        ↪rarely true (1)',
                   'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
        ↪or always true (5)'])
       plt.title('"When I'm doing something, I'm only focused on what I'm doing,␣
        ↪nothing else."',
               size=10,fontweight='bold')
       plt.xlabel('scale',size=9,fontweight='bold')
       plt.ylabel('answer count',size=9,fontweight='bold')
       plt.yticks([0,50,100,150,200,250,300])
       plt.tick_params(axis='both', which='major', labelsize=8.3)
```
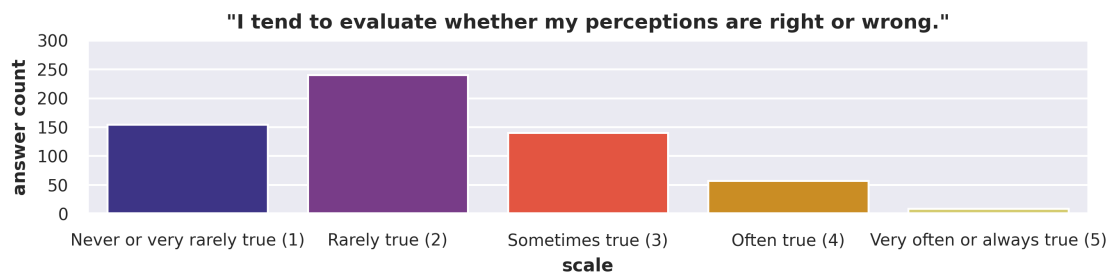
```
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob7',bbox_inches='tight')
```

**"When I'm doing something, I'm only focused on what I'm doing, nothing else."**



[32]:
```
# ACCEPT WITHOUT JUDGMENT SUBSCALE - Question 8

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q8',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I tend to evaluate whether my perceptions are right or wrong."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob8',bbox_inches='tight')
```
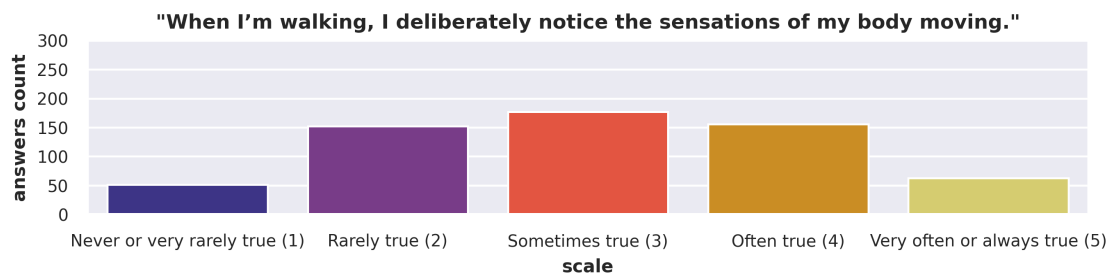
**"I tend to evaluate whether my perceptions are right or wrong."**



[33]:
```
# OBSERVE SUBSCALE - Question 9

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
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```
sns.countplot(x='Q9',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"When I'm walking, I deliberately notice the sensations of my body␣
 ↪moving."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answers count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob9',bbox_inches='tight')
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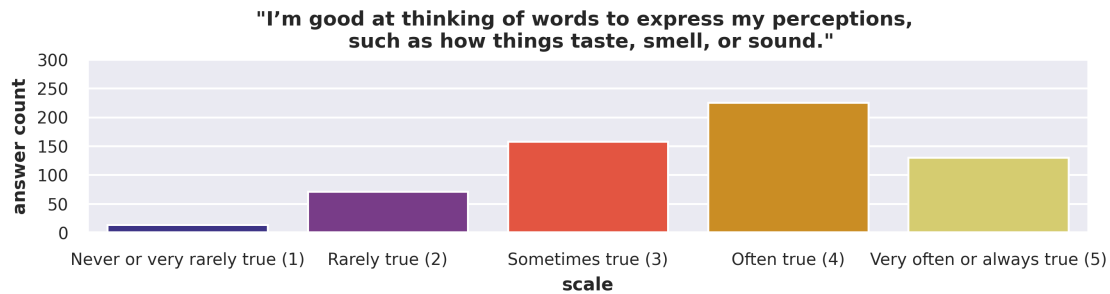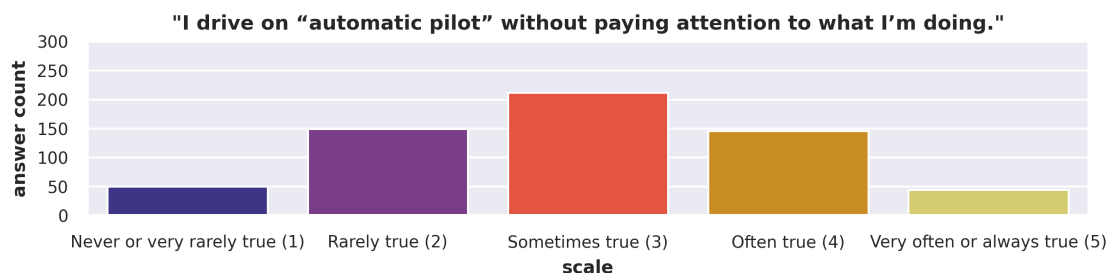


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[91]: # DESCRIBE SUBSCALE - Question 10

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q10',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I'm good at thinking of words to express my perceptions, \n such as␣
 ↪how things taste, smell, or sound."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob10',bbox_inches='tight')
```

**"I'm good at thinking of words to express my perceptions,
such as how things taste, smell, or sound."**



[37]:
```python
# ACT WITH AWARENESS SUBSCALE - Question 11

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q11',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I drive on "automatic pilot" without paying attention to what I'm␣
 ↪doing."',
         size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob11',bbox_inches='tight')
```
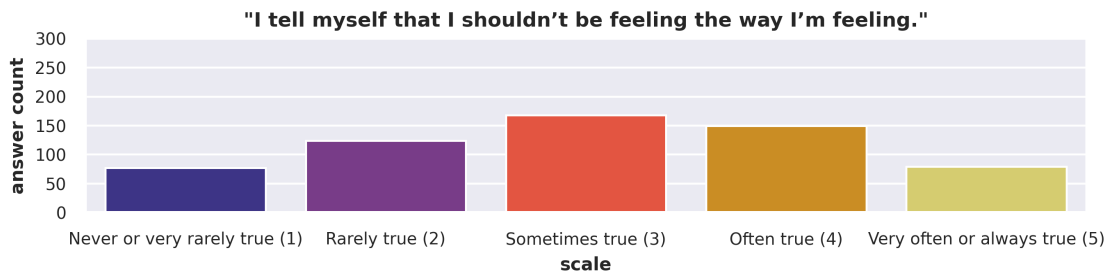
**"I drive on "automatic pilot" without paying attention to what I'm doing."**



[38]:
```python
# ACCEPT WITHOUT JUDGMENT SUBSCALE - Question 12

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q12',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
```

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                'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I tell myself that I shouldn't be feeling the way I'm feeling."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob12',bbox_inches='tight')
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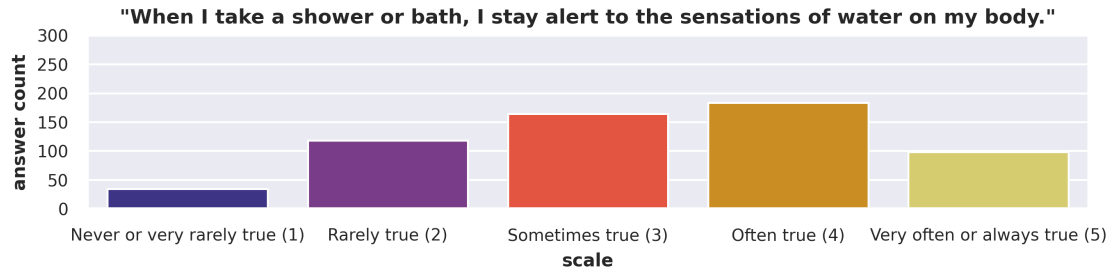


[39]:
```
# OBSERVE SUBSCALE - Question 13

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q13',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
              'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"When I take a shower or bath, I stay alert to the sensations of␣
 ↪water on my body."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob13',bbox_inches='tight')
```

**"When I take a shower or bath, I stay alert to the sensations of water on my body."**
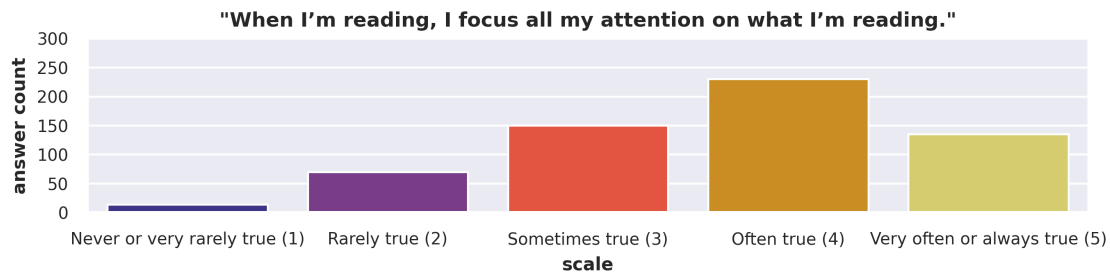


[40]:
```python
# DESCRIBE SUBSCALE - Question 14

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q14',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"It's hard for me to find the words to describe what I'm thinking."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob14',bbox_inches='tight')
```

**"It's hard for me to find the words to describe what I'm thinking."**


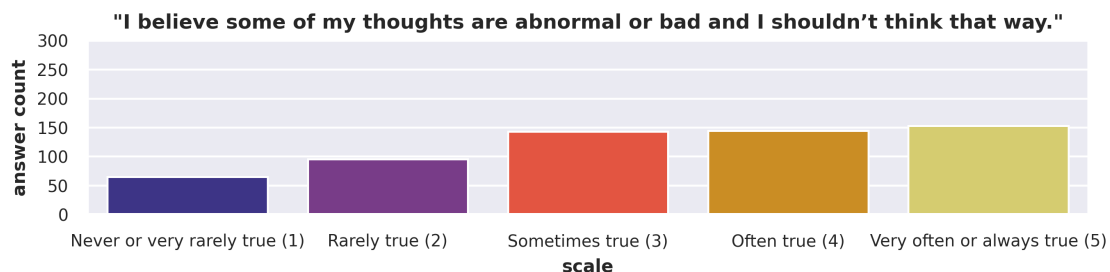
[41]:
```python
# ACT WITH AWARENESS SUBSCALE - Question 15

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q15',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
```

```
plt.title('"When I'm reading, I focus all my attention on what I'm reading."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob15',bbox_inches='tight')
```
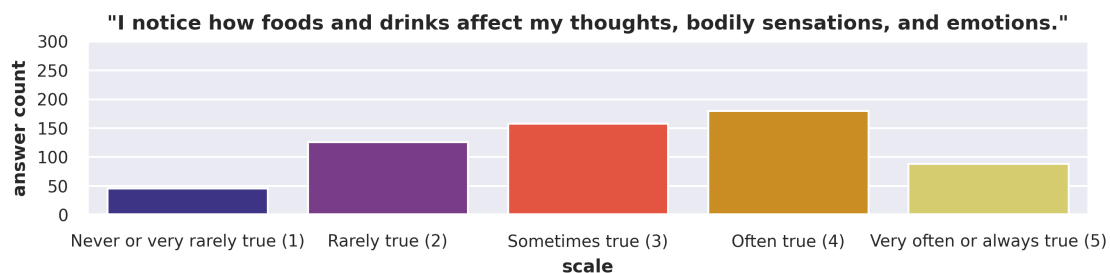


**"When I'm reading, I focus all my attention on what I'm reading."**

[42]:
```
# ACCEPT WITHOUT JUDGMENT SUBSCALE - Question 16

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q16',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I believe some of my thoughts are abnormal or bad and I shouldn't␣
 ↪think that way."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob16',bbox_inches='tight')
```



**"I believe some of my thoughts are abnormal or bad and I shouldn't think that way."**

```
[43]:  # OBSERVE SUBSCALE - Question 17

       plt.figure(figsize=(9,1.6),dpi=350)
       sns.set(style='darkgrid')
       sns.countplot(x='Q17',data=questions,palette='CMRmap',order=['Never or very␣
        ↪rarely true (1)',
                   'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
        ↪or always true (5)'])
       plt.title('"I notice how foods and drinks affect my thoughts, bodily␣
        ↪sensations, and emotions."',
               size=10,fontweight='bold')
       plt.xlabel('scale',size=9,fontweight='bold')
       plt.ylabel('answer count',size=9,fontweight='bold')
       plt.yticks([0,50,100,150,200,250,300])
       plt.tick_params(axis='both', which='major', labelsize=8.3)
       plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
        ↪Mindfulness Skills Responses/All Item Visuals/Ob17',bbox_inches='tight')
```
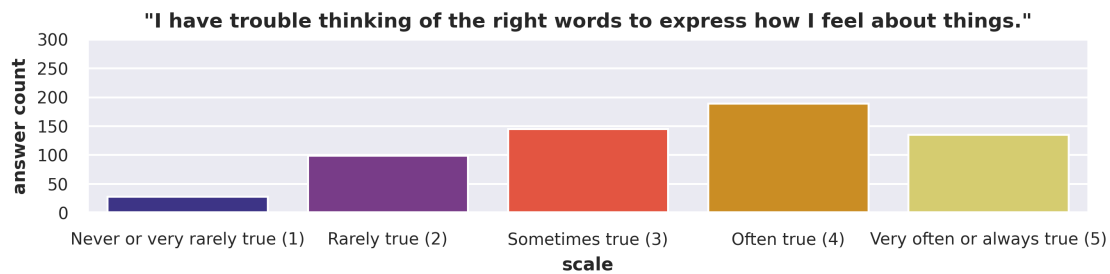


```
[44]:  # DESCRIBE SUBSCALE - Question 18

       plt.figure(figsize=(9,1.6),dpi=350)
       sns.set(style='darkgrid')
       sns.countplot(x='Q18',data=questions,palette='CMRmap',order=['Never or very␣
        ↪rarely true (1)',
                   'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
        ↪or always true (5)'])
       plt.title('"I have trouble thinking of the right words to express how I feel␣
        ↪about things."',
               size=10,fontweight='bold')
       plt.xlabel('scale',size=9,fontweight='bold')
       plt.ylabel('answer count',size=9,fontweight='bold')
       plt.yticks([0,50,100,150,200,250,300])
       plt.tick_params(axis='both', which='major', labelsize=8.3)
```
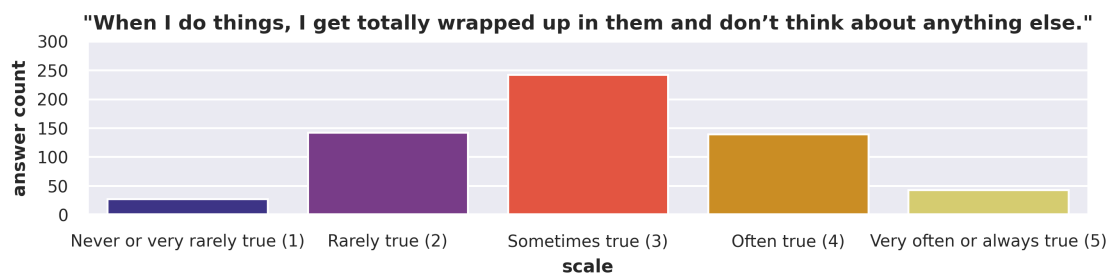
```
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob18',bbox_inches='tight')
```

**"I have trouble thinking of the right words to express how I feel about things."**



```
[45]:  # ACT WITH AWARENESS SUBSCALE - Question 19

       plt.figure(figsize=(9,1.6),dpi=350)
       sns.set(style='darkgrid')
       sns.countplot(x='Q19',data=questions,palette='CMRmap',order=['Never or very␣
        ↪rarely true (1)',
                   'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
        ↪or always true (5)'])
       plt.title('"When I do things, I get totally wrapped up in them and don't think␣
        ↪about anything else."',
               size=10,fontweight='bold')
       plt.xlabel('scale',size=9,fontweight='bold')
       plt.ylabel('answer count',size=9,fontweight='bold')
       plt.yticks([0,50,100,150,200,250,300])
       plt.tick_params(axis='both', which='major', labelsize=8.3)
       plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
        ↪Mindfulness Skills Responses/All Item Visuals/Ob19',bbox_inches='tight')
```
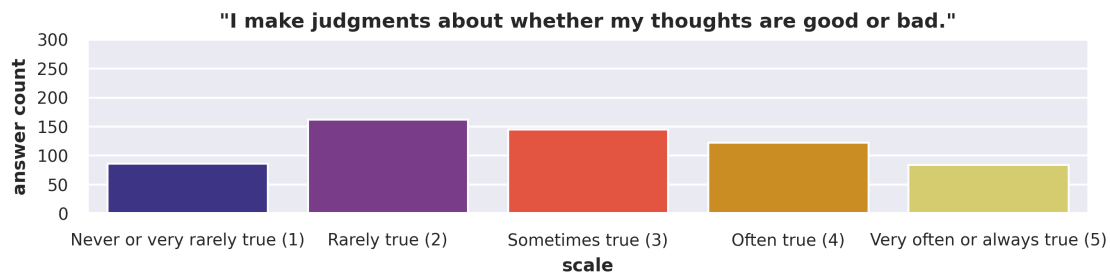
**"When I do things, I get totally wrapped up in them and don't think about anything else."**



```
[46]:  # ACCEPT WITHOUT JUDGMENT SUBSCALE - Question 20

       plt.figure(figsize=(9,1.6),dpi=350)
```

```
sns.set(style='darkgrid')
sns.countplot(x='Q20',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
             'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I make judgments about whether my thoughts are good or bad."',
         size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob20',bbox_inches='tight')
```
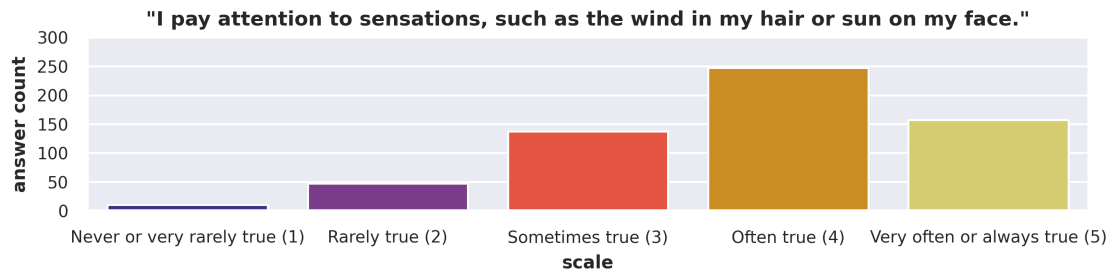


```
[47]:  # OBSERVE SUBSCALE - Question 21

       plt.figure(figsize=(9,1.6),dpi=350)
       sns.set(style='darkgrid')
       sns.countplot(x='Q21',data=questions,palette='CMRmap',order=['Never or very␣
        ↪rarely true (1)',
                    'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
        ↪or always true (5)'])
       plt.title('"I pay attention to sensations, such as the wind in my hair or sun␣
        ↪on my face."',
               size=10,fontweight='bold')
       plt.xlabel('scale',size=9,fontweight='bold')
       plt.ylabel('answer count',size=9,fontweight='bold')
       plt.yticks([0,50,100,150,200,250,300])
       plt.tick_params(axis='both', which='major', labelsize=8.3)
       plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
        ↪Mindfulness Skills Responses/All Item Visuals/Ob21',bbox_inches='tight')
```
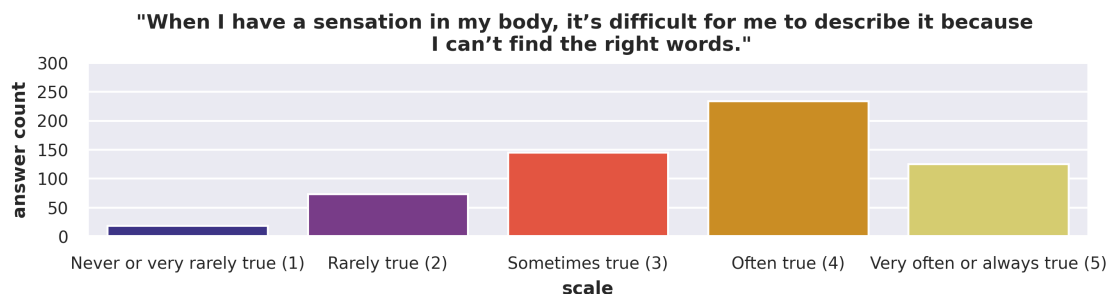
**"I pay attention to sensations, such as the wind in my hair or sun on my face."**



[90]:
```python
# DESCRIBE SUBSCALE - Question 22

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q22',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
             'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"When I have a sensation in my body, it's difficult for me to␣
 ↪describe it because \n I can't find the right words."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob22',bbox_inches='tight')
```
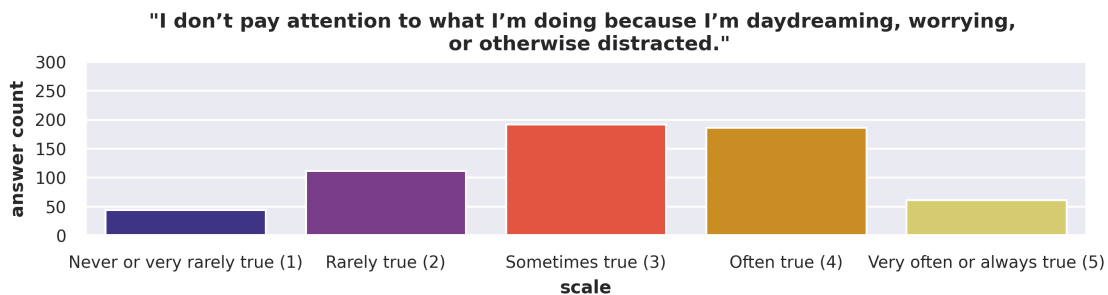
**"When I have a sensation in my body, it's difficult for me to describe it because**
**I can't find the right words."**



[89]:
```python
# ACT WITH AWARENESS SUBSCALE - Question 23

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q23',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
```

16

```
                'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
  ↪or always true (5)'])
plt.title('"I don't pay attention to what I'm doing because I'm daydreaming,␣
  ↪worrying, \n or otherwise distracted."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
  ↪Mindfulness Skills Responses/All Item Visuals/Ob23',bbox_inches='tight')
```
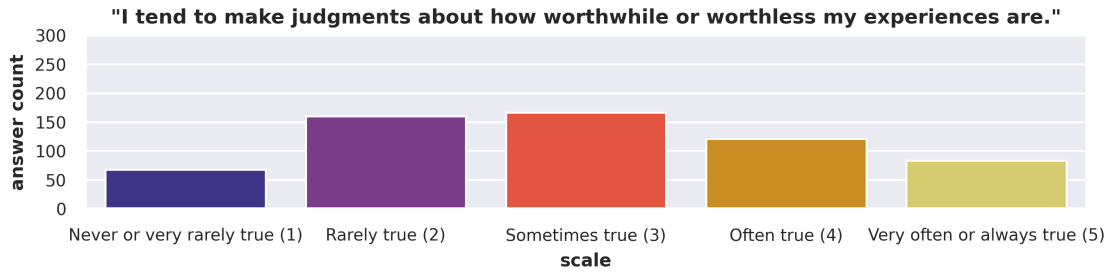


"I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted."

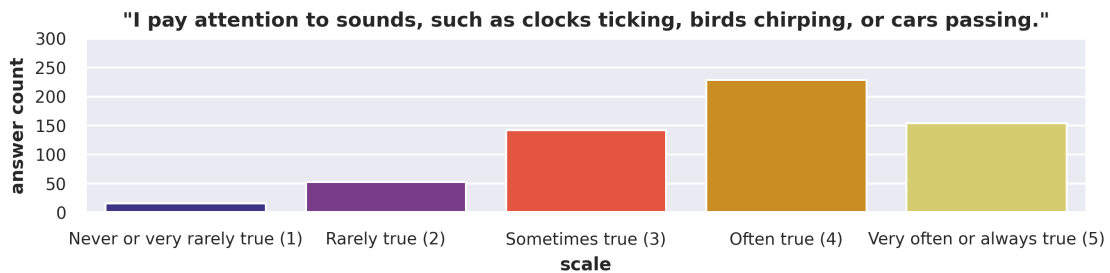[57]:
```
# ACCEPT WITHOUT JUDGMENT SUBSCALE - Question 24

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q24',data=questions,palette='CMRmap',order=['Never or very␣
  ↪rarely true (1)',
                'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
  ↪or always true (5)'])
plt.title('"I tend to make judgments about how worthwhile or worthless my␣
  ↪experiences are."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
  ↪Mindfulness Skills Responses/All Item Visuals/Ob24',bbox_inches='tight')
```

**"I tend to make judgments about how worthwhile or worthless my experiences are."**

[58]:
```python
# OBSERVE SUBSCALE - Question 25

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q25',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I pay attention to sounds, such as clocks ticking, birds chirping,␣
 ↪or cars passing."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob25',bbox_inches='tight')
```
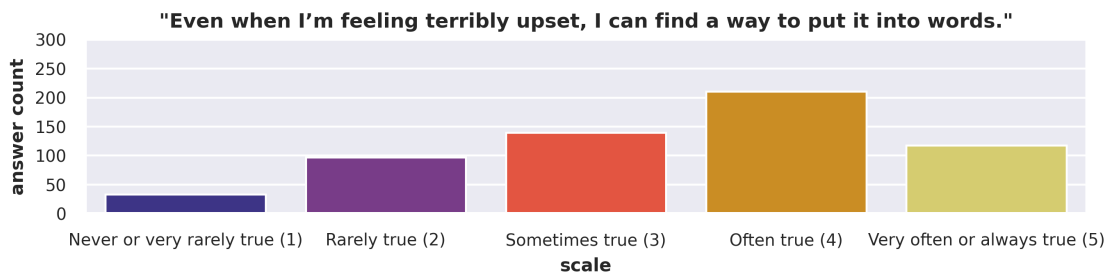


**"I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing."**

[59]:
```python
# DESCRIBE SUBSCALE - Question 26

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q26',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
```

```
              'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
  ↪or always true (5)'])
plt.title('"Even when I'm feeling terribly upset, I can find a way to put it␣
  ↪into words."',
         size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
  ↪Mindfulness Skills Responses/All Item Visuals/Ob26',bbox_inches='tight')
```
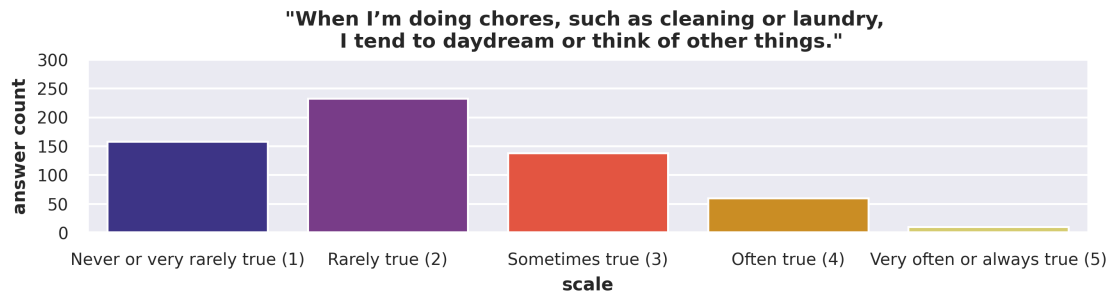


"Even when I'm feeling terribly upset, I can find a way to put it into words."
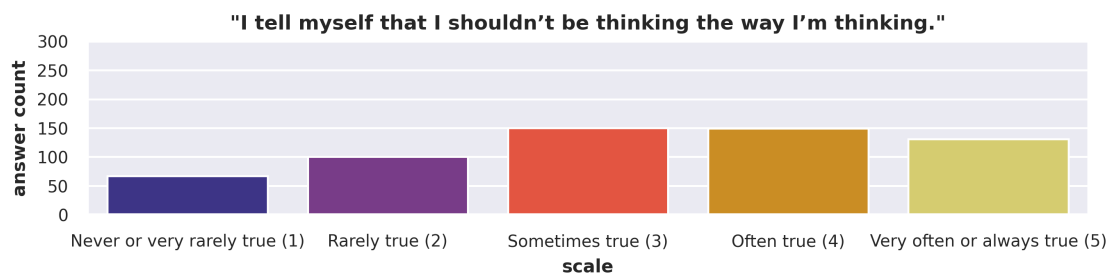
```
[88]: # ACT WITH AWARENESS SUBSCALE - Question 27

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q27',data=questions,palette='CMRmap',order=['Never or very␣
  ↪rarely true (1)',
             'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
  ↪or always true (5)'])
plt.title('"When I'm doing chores, such as cleaning or laundry, \n I tend to␣
  ↪daydream or think of other things."',
         size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
  ↪Mindfulness Skills Responses/All Item Visuals/Ob27',bbox_inches='tight')
```

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**"When I'm doing chores, such as cleaning or laundry,
I tend to daydream or think of other things."**



[63]:
```python
# ACCEPT WITHOUT JUDGMENT SUBSCALE - Question 28

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q28',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I tell myself that I shouldn't be thinking the way I'm thinking."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob28',bbox_inches='tight')
```
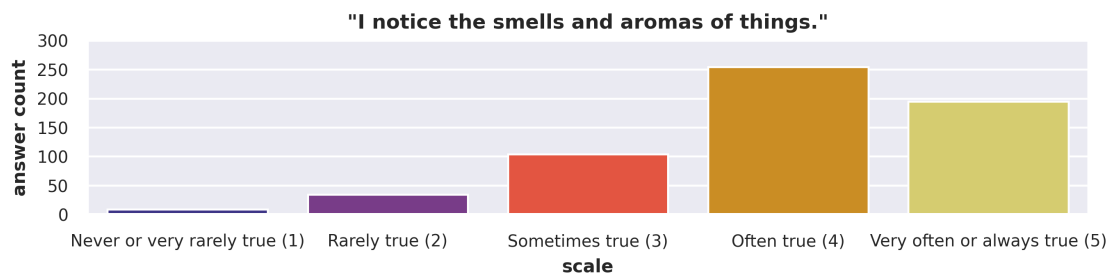
**"I tell myself that I shouldn't be thinking the way I'm thinking."**



[64]:
```python
# OBSERVE SUBSCALE - Question 29

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q29',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
```

```
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I notice the smells and aromas of things."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob29',bbox_inches='tight')
```
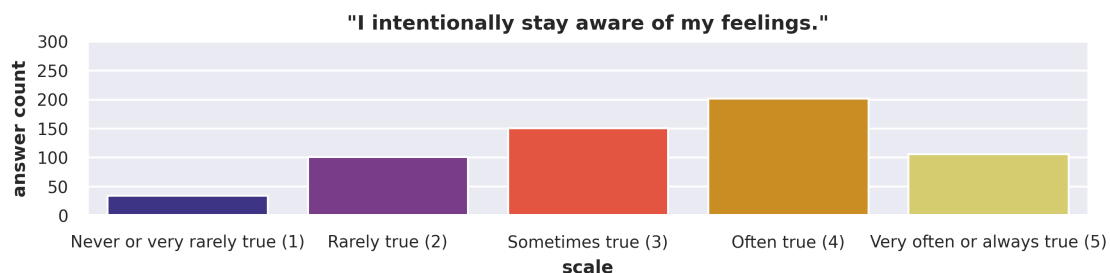
**"I notice the smells and aromas of things."**



```
[65]: # OBSERVE SUBSCALE - Question 30

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q30',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I intentionally stay aware of my feelings."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob30',bbox_inches='tight')
```
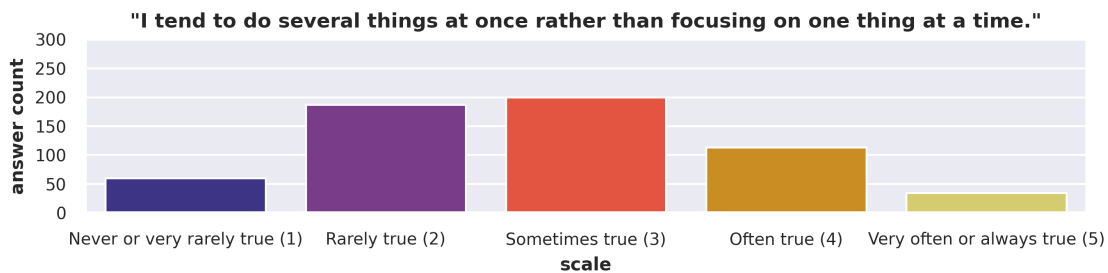
**"I intentionally stay aware of my feelings."**

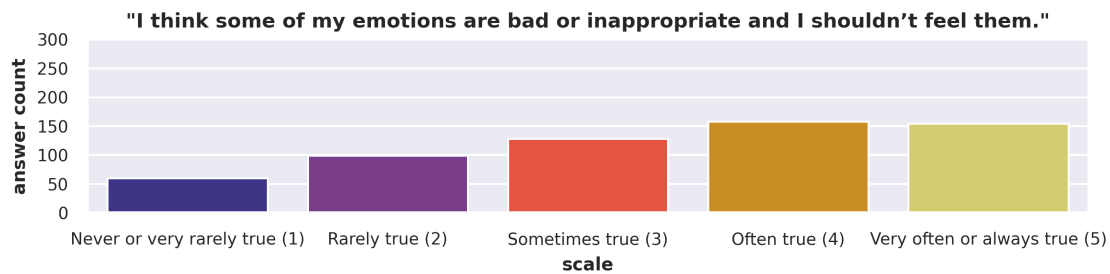[66]: 
```python
# ACT WITH AWARENESS SUBSCALE - Question 31

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q31',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I tend to do several things at once rather than focusing on one␣
 ↪thing at a time."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob31',bbox_inches='tight')
```



[67]: 
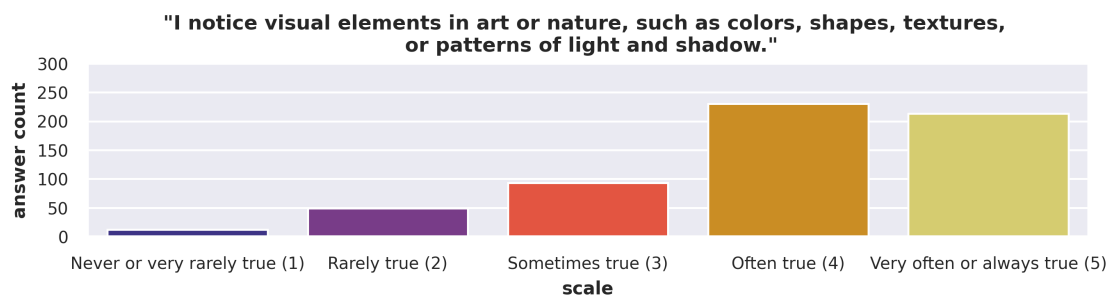```python
# ACCEPT WITHOUT JUDGMENT SUBSCALE - Question 32

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q32',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I think some of my emotions are bad or inappropriate and I␣
 ↪shouldn't feel them."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
```

```
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob32',bbox_inches='tight')
```

**"I think some of my emotions are bad or inappropriate and I shouldn't feel them."**



[87]:
```
# OBSERVE SUBSCALE - Question 33

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q33',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I notice visual elements in art or nature, such as colors, shapes,␣
 ↪textures, \n or patterns of light and shadow."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob33',bbox_inches='tight')
```
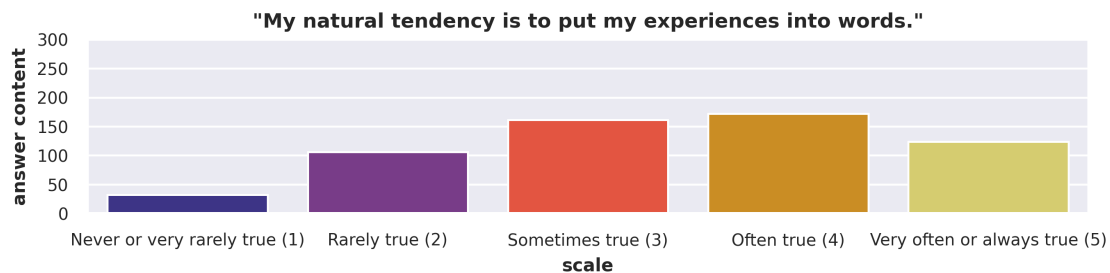
**"I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow."**



[73]:
```
# DESCRIBE SUBSCALE - Question 34

plt.figure(figsize=(9,1.6),dpi=350)
```

```python
sns.set(style='darkgrid')
sns.countplot(x='Q34',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"My natural tendency is to put my experiences into words."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob34',bbox_inches='tight')
```
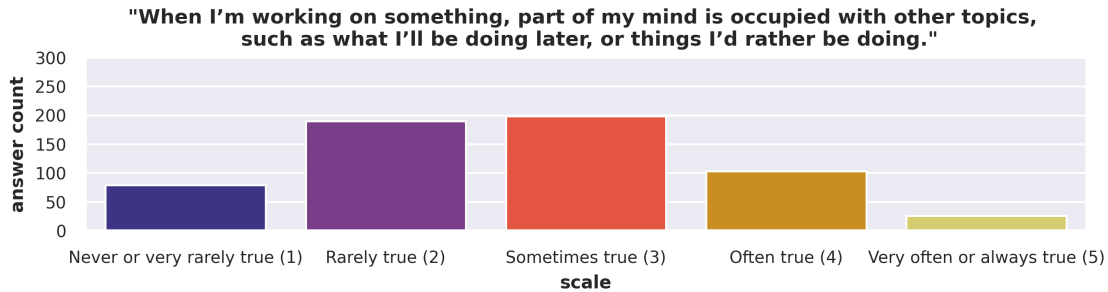


[79]:
```python
# ACT WITH AWARENESS SUBSCALE - Question 35

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q35',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"When I'm working on something, part of my mind is occupied with␣
 ↪other topics, \n such as what I'll be doing later, or things I'd rather be␣
 ↪doing."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob35',bbox_inches='tight')
```
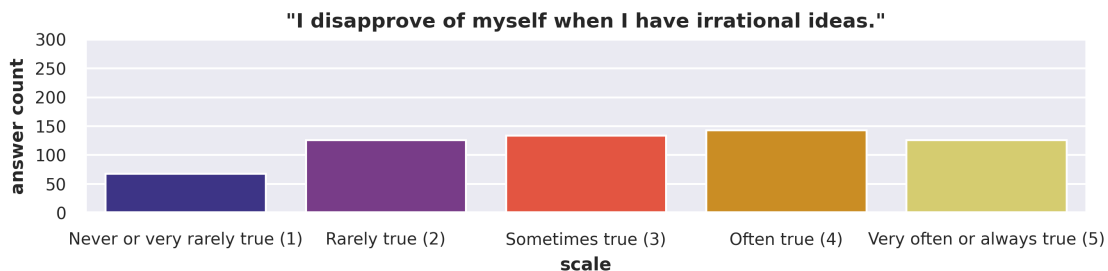
**"When I'm working on something, part of my mind is occupied with other topics,
such as what I'll be doing later, or things I'd rather be doing."**



```
[80]:  # ACCEPT WITHOUT JUDGMENT SUBSCALE - Question 36

       plt.figure(figsize=(9,1.6),dpi=350)
       sns.set(style='darkgrid')
       sns.countplot(x='Q36',data=questions,palette='CMRmap',order=['Never or very␣
        ↪rarely true (1)',
                   'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
        ↪or always true (5)'])
       plt.title('"I disapprove of myself when I have irrational ideas."',
               size=10,fontweight='bold')
       plt.xlabel('scale',size=9,fontweight='bold')
       plt.ylabel('answer count',size=9,fontweight='bold')
       plt.yticks([0,50,100,150,200,250,300])
       plt.tick_params(axis='both', which='major', labelsize=8.3)
       plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
        ↪Mindfulness Skills Responses/All Item Visuals/Ob36',bbox_inches='tight')
```
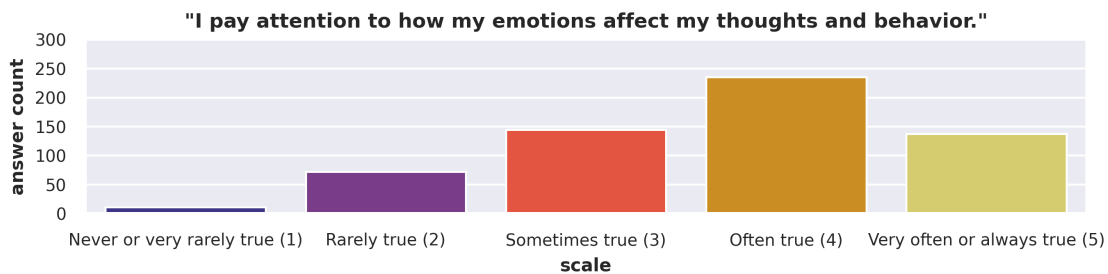
**"I disapprove of myself when I have irrational ideas."**



```
[84]:  # OBSERVE SUBSCALE - Question 37

       plt.figure(figsize=(9,1.6),dpi=350)
       sns.set(style='darkgrid')
       sns.countplot(x='Q37',data=questions,palette='CMRmap',order=['Never or very␣
        ↪rarely true (1)',
```

```
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I pay attention to how my emotions affect my thoughts and behavior.␣
 ↪"',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob37',bbox_inches='tight')
```
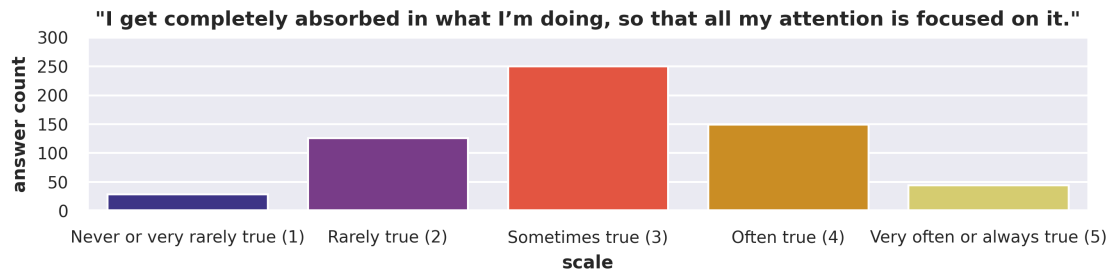


```
[85]: # ACT WITH AWARENESS SUBSCALE - Question 38

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q38',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I get completely absorbed in what I'm doing, so that all my␣
 ↪attention is focused on it."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob38',bbox_inches='tight')
```

**"I get completely absorbed in what I'm doing, so that all my attention is focused on it."**



[86]:
```python
# OBSERVE SUBSCALE - Question 39

plt.figure(figsize=(9,1.6),dpi=350)
sns.set(style='darkgrid')
sns.countplot(x='Q39',data=questions,palette='CMRmap',order=['Never or very␣
 ↪rarely true (1)',
            'Rarely true (2)','Sometimes true (3)','Often true (4)','Very often␣
 ↪or always true (5)'])
plt.title('"I notice when my moods begin to change."',
        size=10,fontweight='bold')
plt.xlabel('scale',size=9,fontweight='bold')
plt.ylabel('answer count',size=9,fontweight='bold')
plt.yticks([0,50,100,150,200,250,300])
plt.tick_params(axis='both', which='major', labelsize=8.3)
plt.savefig('/home/wobbalinux/Desktop/Potential Projects/Kentucky Inventory of␣
 ↪Mindfulness Skills Responses/All Item Visuals/Ob39',bbox_inches='tight')
```

**"I notice when my moods begin to change."**