The American Public's Attitudes over How Judges Use Legal Principles to Make Decisions

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Load the data

```
load("observational_data.RData")
load("experiment_data.RData")
```

Table 2

```
# Overall
overall.plain <- survey %>%
  summarize(weighted.mean(QPHILO3_1 %in% c("Very important", "Somewhat important"), w = Propwts)) #plai
overall.intent <- survey %>%
  summarize(weighted.mean(QPHILO3_2 %in% c("Very important", "Somewhat important"), w = Propwts)) #inte
overall.adopted <- survey %>%
  summarize(weighted.mean(QPHILO3_3 %in% c("Very important", "Somewhat important"), w = Propwts)) #what
overall.precedent <- survey %>%
  summarize(weighted.mean(QPHILO3_4 %in% c("Very important", "Somewhat important"), w = Propwts)) #star
overall.strong <- survey %>%
  summarize(weighted.mean(QPHILO3_5 %in% c("Very important", "Somewhat important"), w = Propwts)) #stro
overall.political <- survey %>%
  summarize(weighted.mean(QPHILO3_6 %in% c("Very important", "Somewhat important"), w = Propwts)) #poli
overall.state <- survey %>%
  summarize(weighted.mean(QPHILO3_7 %in% c("Very important", "Somewhat important"), w = Propwts)) #stat
overall.consequences <- survey %>%
  summarize(weighted.mean(QPHILO3_8 %in% c("Very important", "Somewhat important"), w = Propwts)) #cons
overall.countries <- survey %>%
  summarize(weighted.mean(QPHILO3_9 %in% c("Very important", "Somewhat important"), w = Propwts)) #othe
overall.public <- survey %>%
  summarize(weighted.mean(QPHILO3_10 %in% c("Very important", "Somewhat important"), w = Propwts)) #pub

# By ideology
ideology.plain <- survey %>%
  group_by(ideo3) %>%
  summarize(weighted.mean(QPHILO3_1 %in% c("Very important", "Somewhat important"), w = Propwts)) #plai
ideology.intent <- survey %>%
  group_by(ideo3) %>%
  summarize(weighted.mean(QPHILO3_2 %in% c("Very important", "Somewhat important"), w = Propwts)) #inte
ideology.adopted <- survey %>%
  group_by(ideo3) %>%
  summarize(weighted.mean(QPHILO3_3 %in% c("Very important", "Somewhat important"), w = Propwts)) #what
ideology.precedent <- survey %>%
```

```
  group_by(ideo3) %>%
  summarize(weighted.mean(QPHILO3_4 %in% c("Very important", "Somewhat important"), w = Propwts)) #star
ideology.strong <- survey %>%
  group_by(ideo3) %>%
  summarize(weighted.mean(QPHILO3_5 %in% c("Very important", "Somewhat important"), w = Propwts)) #stro
ideology.political <- survey %>%
  group_by(ideo3) %>%
  summarize(weighted.mean(QPHILO3_6 %in% c("Very important", "Somewhat important"), w = Propwts)) #poli
ideology.state <- survey %>%
  group_by(ideo3) %>%
  summarize(weighted.mean(QPHILO3_7 %in% c("Very important", "Somewhat important"), w = Propwts)) #stat
ideology.consequences <- survey %>%
  group_by(ideo3) %>%
  summarize(weighted.mean(QPHILO3_8 %in% c("Very important", "Somewhat important"), w = Propwts)) #cons
ideology.countries <- survey %>%
  group_by(ideo3) %>%
  summarize(weighted.mean(QPHILO3_9 %in% c("Very important", "Somewhat important"), w = Propwts)) #othe
ideology.public <- survey %>%
  group_by(ideo3) %>%
  summarize(weighted.mean(QPHILO3_10 %in% c("Very important", "Somewhat important"), w = Propwts)) #pub

t2.plain.meaning <- c(overall.plain$`weighted.mean(...)`, ideology.plain$`weighted.mean(...)`[c(2,3,1)]
t2.original.intent <- c(overall.intent$`weighted.mean(...)`, ideology.intent$`weighted.mean(...)`[c(2,3
t2.opinion.when.adopted <- c(overall.adopted$`weighted.mean(...)`, ideology.adopted$`weighted.mean(...)
t2.precedent <- c(overall.precedent$`weighted.mean(...)`, ideology.precedent$`weighted.mean(...)`[c(2,3
t2.average.traditional <- apply(rbind(t2.plain.meaning, t2.original.intent, t2.opinion.when.adopted, t2

t2.plain.meaning <- paste(as.character(round(t2.plain.meaning*100,0)),"%",sep="")
t2.original.intent <- paste(as.character(round(t2.original.intent*100,0)),"%",sep="")
t2.opinion.when.adopted <- paste(as.character(round(t2.opinion.when.adopted*100,0)),"%",sep="")
t2.precedent <- paste(as.character(round(t2.precedent*100,0)),"%",sep="")
t2.average.traditional <- paste(as.character(round(t2.average.traditional*100,0)),"%",sep="")

t2.consequences <- c(overall.consequences$`weighted.mean(...)`, ideology.consequences$`weighted.mean(..
t2.other.countries <- c(overall.countries$`weighted.mean(...)`, ideology.countries$`weighted.mean(...)`
t2.public.opinion <- c(overall.public$`weighted.mean(...)`, ideology.public$`weighted.mean(...)`[c(2,3,
t2.average.non.traditional <- apply(rbind(t2.consequences, t2.other.countries, t2.public.opinion), 2, me

t2.consequences <- paste(as.character(round(t2.consequences*100,0)),"%",sep="")
t2.other.countries <- paste(as.character(round(t2.other.countries*100,0)),"%",sep="")
t2.public.opinion <- paste(as.character(round(t2.public.opinion*100,0)),"%",sep="")
t2.average.non.traditional <- paste(as.character(round(t2.average.non.traditional*100,0)),"%",sep="")

t2.strong.reason <- c(overall.strong$`weighted.mean(...)`, ideology.strong$`weighted.mean(...)`[c(2,3,1)
t2.political.activity <- c(overall.political$`weighted.mean(...)`, ideology.political$`weighted.mean(..
t2.state.federal <- c(overall.state$`weighted.mean(...)`, ideology.state$`weighted.mean(...)`[c(2,3,1)]

t2.strong.reason <- paste(as.character(round(t2.strong.reason*100,0)),"%",sep="")
t2.political.activity <- paste(as.character(round(t2.political.activity*100,0)),"%",sep="")
t2.state.federal <- paste(as.character(round(t2.state.federal*100,0)),"%",sep="")


t2.dataframe <- data.frame(rbind(t2.average.traditional, t2.plain.meaning, t2.original.intent, t2.opinio
```

```
                                t2.average.non.traditional, t2.consequences, t2.other.countries, t2.pu
                                t2.strong.reason, t2.political.activity, t2.state.federal),
                                   row.names = c("Traditional principles","Plain meaning","Original in
                                                 "Non-traditional principles","Consequences","Other co
                                                 "Strong reason","Political activity","State or federa
colnames(t2.dataframe) <- c("All","Liberal","Moderate","Conservative")

xtable(t2.dataframe)
```

```
## % latex table generated in R 4.3.1 by xtable 1.8-4 package
## % Fri Sep 15 17:53:47 2023
## \begin{table}[ht]
## \centering
## \begin{tabular}{rllll}
##   \hline
##  & All & Liberal & Moderate & Conservative \\
##   \hline
## Traditional principles & 80\% & 80\% & 81\% & 81\% \\
##   Plain meaning & 81\% & 82\% & 83\% & 79\% \\
##   Original intent & 88\% & 86\% & 87\% & 92\% \\
##   Opinion when adopted & 74\% & 70\% & 75\% & 75\% \\
##   Precedent & 78\% & 81\% & 77\% & 76\% \\
##   Non-traditional principles & 56\% & 64\% & 61\% & 42\% \\
##   Consequences & 80\% & 89\% & 84\% & 69\% \\
##   Other countries & 40\% & 48\% & 44\% & 26\% \\
##   Public opinion & 48\% & 57\% & 54\% & 32\% \\
##   Strong reason & 84\% & 83\% & 86\% & 82\% \\
##   Political activity & 62\% & 68\% & 64\% & 55\% \\
##   State or federal & 87\% & 90\% & 87\% & 84\% \\
##    \hline
## \end{tabular}
## \end{table}
```

Figure 1

```
# Creates a new "long" dataset with an observation for each of the 10 principles questions for each res
survey_long <- survey %>% gather(question,principles,principles1:principles10)

survey_long$question[survey_long$question=="principles1"] <- "Plain Meaning (T)"
survey_long$question[survey_long$question=="principles2"] <- "Original Intent (T)"
survey_long$question[survey_long$question=="principles3"] <- "Opinion when Adopted (T)"
survey_long$question[survey_long$question=="principles4"] <- "Precedent (T)"
survey_long$question[survey_long$question=="principles5"] <- "Strong Reason (Other)"
survey_long$question[survey_long$question=="principles6"] <- "Political Activity (Other)"
survey_long$question[survey_long$question=="principles7"] <- "State or Federal (Other)"
survey_long$question[survey_long$question=="principles8"] <- "Consequences (NT)"
survey_long$question[survey_long$question=="principles9"] <- "Other Countries (NT)"
survey_long$question[survey_long$question=="principles10"] <- "Public Opinion (NT)"

# Create index of first four principles (traditional) and last three principles (non-traditional)
trad <- survey %>%
  mutate(Support = (principles1 + principles2 + principles3 + principles4) / 4,
         Group = "Traditional Principles")
```

```r
non_trad <- survey %>%
  mutate(Support = (principles8 + principles9 + principles10) / 3,
         Group = "Non-Traditional Principles")

# Creating the figure -- plots the combined traditional and non-traditional results first, then the ind
pdf("figure-1.pdf")
survey_long %>%
  rename(Support = principles) %>% # Renames principles evaluation variable to Support
  bind_rows(rename(trad, question = Group)) %>%
  bind_rows(rename(non_trad, question = Group)) %>%
  mutate(Support = (Support - 1) / 3, # Makes support 0-1
         ideo3 = factor(ideo3, levels = c("Conservative", "Moderate", "Liberal")),
         question = factor(question, levels = c("Traditional Principles",
                                                "Non-Traditional Principles",
                                                "Plain Meaning (T)",
                                                "Original Intent (T)",
                                                "Opinion when Adopted (T)",
                                                "Precedent (T)",
                                                "Consequences (NT)",
                                                "Other Countries (NT)",
                                                "Public Opinion (NT)",
                                                "Strong Reason (Other)",
                                                "Political Activity (Other)",
                                                "State or Federal (Other)"))) %>%
  filter(ideo3 != "Moderate") %>% # Omits moderate
  ggplot(aes(y=Support,x=knowledge,color=ideo3,linetype = ideo3,weight=Propwts)) + # Defining what will
  geom_smooth(method="lm") + # Plotting linear fits, inherits the aesthetic mappings from aes above
  ylab("Average Support for Principle") +
  xlab("Court Knowledge") +
  facet_wrap(~question) + # Different panels for each principle or grouping of principles
  guides(color=guide_legend(title="Ideology"),
         linetype = guide_legend(title = "Ideology")) + theme_bw() +
  scale_color_manual(values=c("Red", "Blue")) +
  theme(panel.border = element_blank(), panel.grid.major = element_blank(),
        panel.grid.minor = element_blank(), axis.line = element_line(colour = "black"))
```

```
## `geom_smooth()` using formula = 'y ~ x'
```

```r
dev.off()
```

```
## pdf
##   2
```

Figure 2

```r
# ExperimentalCondition==2 indicates respondents who were randomized into the consequences experiment
# Formal t-tests, for numbers written in text
# Positive ("Both Important") versus Negative ("Neither Important")
neither.t.test <- t.test(filter(turk,ExperimentalCondition==2,cueStrength=="Both Important")[,"outcome"]
                         filter(turk,ExperimentalCondition==2,cueStrength=="Neither Important")[,"outcom
# Positive ("Both Important") versus Mixed ("Mixed Importance")
mixed.t.test <- t.test(filter(turk,ExperimentalCondition==2,cueStrength=="Both Important")[,"outcome"],
                       filter(turk,ExperimentalCondition==2,cueStrength=="Mixed Importance")[,"outcome"]
```

```r
# Positive ("Both Important") versus nothing ("No Justification Given")
nothing.t.test <- t.test(filter(turk,ExperimentalCondition==2,cueStrength=="Both Important")[,"outcome"]
                         filter(turk,ExperimentalCondition==2,cueStrength=="No Justification Given")[,"

# Replicating the above t-tests but in a regression framework; outcome variable is support, predictors
fit_all <- lm(outcome~cueStrength, data = filter(turk, ExperimentalCondition == 2))
# summary(fit_all)

# Plot of differences when moving from both to one of the other conditions
# Size of all the differences
coefs_from_both <- c(fit_all$coefficients["cueStrengthNeither Important"],
                     fit_all$coefficients["cueStrengthMixed Importance"],
                     fit_all$coefficients["cueStrengthNo Justification Given"])
# Confidence intervals around the differences, these come from the formal t-tests above
ci95_high <- c(neither.t.test$conf.int[2]*-1,mixed.t.test$conf.int[2]*-1,nothing.t.test$conf.int[2]*-1)
ci95_low <- c(neither.t.test$conf.int[1]*-1,mixed.t.test$conf.int[1]*-1,nothing.t.test$conf.int[1]*-1)

# Making the plot
pdf("figure-2.pdf")
tibble(Estimate = coefs_from_both,
       ci_high = ci95_high,
       ci_low = ci95_low,
       Group = c("Neither Important","Mixed Importance","No Justification Given")) %>%
  mutate(Group = factor(Group, levels = c("Neither Important","Mixed Importance","No Justification Given
  ggplot(aes(x = Estimate,
             y = Group,
             xmin = ci95_low,
             xmax = ci95_high,
             color = Group)) +
  geom_point() +
  geom_errorbar(position = position_dodge(width = 0.9),
                width = 0.2) +
  #  coord_flip() +
  scale_color_brewer(type = "qual", palette = "Dark2") +
  scale_fill_brewer(type = "qual", palette = "Dark2") +
  ylab("") +
  xlab("Change in Support when Compared to Both Important") +
  labs(color = "Experimental Condition") +
  theme_classic() +
  theme(legend.position = "none") +
  geom_vline(xintercept=c(0), linetype="dotted")
dev.off()
```

```
## pdf
##   2
```