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Running head: THE EFFECTS OF RELIGIOUS INVOLVEMENT

The Effects of Religious Involvement on Short-Term Psychological Reactions to the  
Death of Pope John Paul II: A Study on an Italian Sample

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Authors' note

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### Abstract

This study investigates the short-term psychological reactions to the death of Pope John Paul II. Between one to six days after this event, 526 Catholic and atheist Italian adults took part in a questionnaire study. Participants were asked to report the personal circumstances in which they first learned about the Pope's death, their emotional reactions, and their appraisal of the event's importance and consequentiality. Other questions assessed immediate memory for the original event, surprise-expectedness, exposure to mass media, and religious involvement. Results showed that the news of the Pope's death, although widely expected, had a strong cognitive and emotional impact. Almost all the participants were able to recall the personal circumstances in which they heard the news. A positive relation was observed between the degree of religious involvement and appraisal of importance and consequentiality, intensity of emotion, memory for event-related details, and frequency of exposure to mass media. Effects related to the age of the participants were also found.

Key words: religious involvement, cognitive and emotional impact, public event

## The Effects of Religious Involvement on Short-Term Psychological Reactions to the Death of Pope John Paul II: A Study on an Italian Sample

In recent years, psychologists have become increasingly interested in studying psychological reactions to emotionally powerful news events. Research conducted on this subject was inspired by the occurrence of several dramatic facts such as the explosion of the space shuttle Challenger (Bohannon, 1988; Neisser & Harsch, 1992), the death of Princess Diana (Brown, Basil, & Bocarnea, 2003), and the September 11 terrorist attacks (Lee & Brown, 2003; Luminet et al., 2004; Pezdek, 2003; Silver, Holman, McIntosh, Poulin, & Gil-Rivas, 2002; Smith, Bibi, & Sheard, 2003; Tekcan, Ece, Gülgöz, & Er, 2003).

The majority of the above-cited studies centred their attention on the so-called flashbulb memory (Brown & Kulik, 1977). This concept refers to people's ability to recall the circumstances in which they first heard about a specific event (i.e. the time, the informant, where they were, who they were with, and what they were doing). Other aspects investigated in these studies were memory for event-related details, emotional reactions, appraisals of importance and consequentiality, mass media exposure, and the social sharing of the news. Generally these studies entailed a test-retest methodology, studying both, the immediate memory of the event shortly after it occurred, and the maintenance and distortion of the recalled event in the long-term.

Taken together, the studies conducted thus far have demonstrated that the psychological impact of a newsworthy event significantly varies as a function of the participants' involvement with the event. For instance, with reference to the September 11 attacks, Luminet et al. (2004) showed that USA participants considered this event to be more important than did participants living in countries far away from USA (e.g., Italy, France). Moreover, they found that the U.S. respondents reported more intense

emotions and were able to recall a greater number of event-related details than participants from other countries. In the same way, Smith et al. (2003) found that Canadian participants who experienced higher emotional involvement at the time of the terrorist attacks had better event memory than those who experienced lower levels of emotional involvement. Similar findings have been reported in other studies (Pezdek, 2003; Tekcan et al., 2003). Interestingly, participant involvement has been conceptualized in different ways. While some authors have defined this variable in terms of psychological (Tekcan et al., 2003) or physical distance (Luminet et al., 2004), others consider it to be the degree of emotional arousal elicited by the event (Smith et al., 2003).

The present work aims to investigate the immediate psychological reactions of a sample of Catholic and atheist Italian adults to a highly relevant public event: the death of Pope John Paul II. In contrast with other events investigated thus far, this one did not happen suddenly and moreover it was expected. In fact, the Pontiff had been seriously ill for several weeks before dying in Rome on Saturday, 2 April, 2005, at 9.37 a.m. The cause of his death was listed as septic shock and cardio-circulatory collapse. Because the Catholic Church is so deeply-rooted in Italy, the news of the Pope's death provoked an immediate and powerful resonance in the mass media and captured the attention of a significant part of Catholic as well as atheist Italians. The media amplification of this event gave us a unique opportunity to assess its psychological impact soon after it occurred. More precisely, data were collected by a questionnaire between 3 and 8 April 2005, that is the time span between the Pope's death and the day of his funeral.

In line with previous research (e.g. Luminet et al., 2004), we expected that the higher the involvement with the event, the higher will be the attributed importance and consequentiality to the event, and the ability to encode and remember specific event-

related details. Considering the nature of the event investigated, we also predicted that the higher the degree of participants' involvement, the higher the intensity of reported negative emotions, especially sadness. In the present study, the participants' involvement with the event was operationalized in terms of their degree of religious involvement, that is the extent to which they were faithful and church-goers. In fact, it is reasonable to assume that the more one is religious, the greater the personal involvement with the Pope's death.

## Method

### *Participants*

A total of 575 participants took part in this study. Five of them were excluded because they professed a religion other than Catholicism, 40 because they indicated a date of compilation that came after 8 April, and two others because they were not Italians. The final sample was composed of 526 participants: 375 (71.3%) were females and 151 (28.7%) were males. The age of participants ranged from 18 to 84 years ( $M = 34.26$ ,  $SD = 13.99$ ). Regarding education, 34.3% of the respondents had a university degree, 55.4% a professional or high school diploma, 8.2% had attended secondary school and 2.1% primary school. Sixty-two per cent of the respondents were unmarried, 33.7% married, while the remaining participants were divorced, separated or widowed. With regard to work status, the sample consisted of students (36.4%), employees (31.9%), professionals (13.6%), housewives (4.8%), retired persons (4.6%), and people in other work status (8.7%).

### *Measures*

We used a modified version of the Luminet et al.'s (2004) questionnaire. Major changes concerned the introduction of some new items, the exclusion of some others,

and the use of 11 instead of 7-point scales. For the present study we will focus on the following eight sets of questions.

(1) *Personal circumstances in which the event was learned.* Seven open-ended questions asked participants to report the circumstances in which they first learned about the Pope's death. Questions concerned the following details: (a) the date, (b) the day of the week, c) the hour, (d) the informant, (e) the place they were, (f) the people they were with, and (g) their ongoing activity. Responses were grouped into categories by judges.

(2) *Memory for the original event.* Four open-ended questions assessed the participants' ability to recall factual information about the Pope's death. In particular, they were asked to report: (a) the date, (b) the day of the week, (c) the time of the day, and (d) the cause of the death. For each question the participants could also choose the alternatives: "I do not remember" or "I do not know". The correctness of the reported information was assessed by judges.

(3) *Appraisal of importance and consequentiality.* Participants rated on 11-point scales (0 = *not at all*, 10 = *very much*) to what extent the event was important for themselves and to what extent it had consequences for their life.

(4) *Emotional reactions.* Participants were asked to think of when they first learnt about the Pope's death and to rate the intensity with which they felt each of nine emotions (anger, sadness, fear, joy, anxiety, embarrassment, guilt, interest, and boredom) on 11-point scales (0 = *not at all*, 10 = *extremely*).

(5) *Surprise-expectedness.* Participants rated on 11-point scales (0 = *not at all*, 10 = *very much*) to what extent they were surprised upon learning of the Pope's death and to what extent they expected this event.



(6) *Following the mass media.* Participants rated on 11-point scales (0 = *never*, 10 = *very often*) the frequency with which they followed the news via: a) TV, b) radio, and c) newspapers.

(7) *Religious involvement.* An open-ended question asked participants which religion they professed; if they were atheists they were to specify it. Religious involvement was then assessed by two items which asked respondents to rate on an 11-point scales (0 = *not at all*, 10 = *very much*) to what extent they perceived themselves as: (a) faithful and (b) church-goers.

(8) *Socio-demographic characteristics.* We assessed gender, age, education, marital status, occupation, and nationality.

#### *Procedure*

In order to recruit persons with different levels of religious involvement, questionnaires were distributed among members of Catholic churches, university students, and other adults living in major cities in Italy (e.g. Turin, Rome, Bari). Participants were informed that the questionnaire was anonymous.

#### *Data analysis*

Cross-tabulations and chi-square tests were used to analyze the categorical variables. MANOVAs were computed to assess the impact of religious involvement, gender and age on the continuous variables. Since literature on emotion and memory reports ambiguous results on possible gender differences (Fujita, Diener, & Sandvik, 1991; Morse, Woodward, & Zweigenhaft, 1993), we considered gender as independent variable, while age was considered as covariate to control for its possible effects.

#### *Scoring of religious involvement*

Our sample was divided into four groups: Of the 526 participants, 450 (85.6%) were Catholics and 76 (14.4%) were atheists. We considered the 76 *atheists* as our first

group. With respect to the 450 Catholics, they were further divided into three groups on the basis of a composite score resulting from the mean between the two items “faithful” and “church-goers”<sup>1</sup>. Considering the implicit meaning of the possible values of this score, the sample was divided in three parts: Participants whose mean score was less than 3.5 were included in the *low religious group* ( $n = 106$ , 20.2%), those whose mean score ranged from 3.5 to 6.5 in the *moderate religious group* ( $n = 156$ , 29.7%) and the ones whose mean score was more than 6.5 in the *high religious group* ( $n = 188$ , 35.7%).

### Results

*Personal circumstances in which the event was learned.* Irregardless of religious involvement, nearly all participants were able to report the personal circumstances in which the event was learned (the percentages of missing or “I do not remember” answers ranged from 0% to 1.7% for the seven items). In particular, 88.6% of the participants reported they learned the news of the Pope’s death on Saturday 2 April, and 10.1% the day after. Most of them (74.1%) learned the news within one hour after the event occurred. The major sources of information were TV (58.9%) and other people (22.7%). Most of participants were at their home (58.5%) or at the home of friends/relatives (11.0%). Consequently, their main activities were watching TV or having dinner, and they were generally with relatives and friends.

*Religious involvement and memory for the original event.* As shown in Table 1, almost all participants correctly reported the date and the day of the event, whereas the percentages of correct answers were lower regarding the time and the cause of the Pope’s death. Chi-square tests show that the frequencies of correct and false<sup>2</sup> answers are not equally distributed across groups of religious involvement. More precisely, there is a positive relation between degree of religious involvement and percentages of correct answers about the date of the death,  $\chi^2(3, N = 526) = 15.24, p < .01$ , the day of the week

it happened,  $\chi^2(3, N = 525) = 14.21, p < .01$ , and the time,  $\chi^2(3, N = 526) = 24.31, p < .001$ , whereas there is no significant association with regard to its cause,  $\chi^2(3, N = 515) = 3.99, p = .26$ .

--- Insert Table 1 about here ---

*Religious involvement and appraisal of importance and consequentiality.*

Descriptive analyses indicate that overall the Pope's death was judged as a very important event ( $M = 7.10, SD = 2.70$ ), but as having rather low personal consequences ( $M = 3.42, SD = 2.99$ ) (see Table 2). MANOVA shows a main effect of religious involvement,  $F(6, 1022) = 31.12, p < .001$ , and age,  $F(2, 510) = 8.62, p < .001$ .

Regarding age, the estimated parameters show a significant negative relation between age and event consequentiality ( $B = -.036, p < .001$ ), and a marginally significant negative relation between age and importance ( $B = -.013, p = .07$ ). In order to more precisely determine the differences between the four religious involvement groups we proceeded in two steps. First, the non-standardized residuals of importance and consequentiality were calculated by taking into account only the covariate age. Second, a further MANOVA was computed on these residuals with gender and religious involvement as independent variables; the differences between the four religious involvement groups were then tested by Bonferroni post-hoc tests<sup>3</sup>. This analysis shows only a main effect of religious involvement,  $F(6, 1024) = 30.44, p < .001$ . Regarding importance, the Pope's death was most important for the high religious group ( $M = 1.56, SD = 1.69$ ), followed by the moderate religious group ( $M = 0.26, SD = 2.19$ ), the low religious group ( $M = -1.16, SD = 2.44$ ), and the atheist group ( $M = -2.74, SD = 3.18$ ). The means of the four groups differed significantly ( $p < .001$ ) from one another. Similarly, the Pope's death was judged as having most consequences for the personal life of the high religious group ( $M = 1.56, SD = 1.69$ ), followed by the moderate

religious group ( $M = 0.26$ ,  $SD = 2.19$ ), the low religious group ( $M = -1.16$ ,  $SD = 2.44$ ), and the atheist group ( $M = -2.74$ ,  $SD = 3.18$ ). With the exception of the comparison between the atheist and the low religious groups, each group differed significantly ( $p < .001$ ) from the others.

--- Insert Table 2 about here ---

*Religious involvement and surprise-expectedness.* Overall, participants were not very surprised ( $M = 1.46$ ,  $SD = 2.24$ ) and generally reported that they expected the Pope's death ( $M = 8.15$ ,  $SD = 2.15$ ). The MANOVA shows only a main effect for age,  $F(2, 510) = 5.77$ ,  $p < .01$ . The younger the participants, the more surprised they were ( $B = -.021$ ,  $p < .001$ ).

*Religious involvement and emotional reaction.* Table 3 shows that when they heard about the Pope's death, the participants felt mostly sadness ( $M = 6.90$ ,  $SD = 2.97$ ) and interest ( $M = 6.29$ ,  $SD = 3.20$ ). The MANOVA computed to test the effects of religious involvement, gender, and age on emotional reactions shows only a main effect of age,  $F(9, 497) = 6.54$ ,  $p < .001$  and religious involvement,  $F(27, 1497) = 6.11$ ,  $p < .001$ . The younger the participants were, the more they felt anger ( $B = -.016$ ,  $p < .05$ ), fear ( $B = -.028$ ,  $p < .001$ ), interest ( $B = -.045$ ,  $p < .001$ ) and guilt ( $B = -.027$ ,  $p < .001$ ), whereas the older they were, the more they reported boredom ( $B = .013$ ,  $p < .05$ ). In order to analyse the effect of religious involvement, the same strategy was used as the one that is described above: The effect of age was controlled by calculating the residuals of the emotion variables and by computing a further MANOVA with Bonferroni post-hoc tests. This analysis shows only a main effect of religious involvement,  $F(27, 1500) = 6.04$ ,  $p < .001$ : The high and moderate religious participants reported more intense sadness, interest, fear, anxiety, anger, and guilt than did the low religious and atheist

participants. Moreover, respondents with high religious involvement reported less boredom compared to atheist and low religious participants (see Table 3).

--- Insert Table 3 about here ---

*Religious involvement and following the mass media.* To test the possible effect that religious involvement has on the degree to which participants followed the news of the Pope's death on the mass media, we computed the mean score of the three items that measure this dimension. The MANOVA computed on this mean score shows only a main effect of religious involvement,  $F(3, 505) = 29.31, p < .001$ ). Mass media were mostly followed by the high religious group ( $M = 5.81, SD = 2.10$ ), then by the moderate religious group ( $M = 4.84, SD = 2.16$ ), the low religious group ( $M = 3.82, SD = 2.26$ ), and finally the atheist group ( $M = 3.44, SD = 2.56$ ). The means of the four groups differed significantly ( $p < .05$ ) by the Bonferroni post-hoc test, except for the comparison between atheists and low religious participants.

### Discussion

The present study aimed to investigate the short-term psychological reactions to the death of Pope John Paul II in a sample of Catholic and atheist Italian adults.

The results showed that the Pope's death was a highly expected public event. Nevertheless, it had a strong cognitive and emotional impact. On average, the participants judged the Pope's death as a very important event in their life that elicited rather strong emotional feelings of sadness and interest. The majority of participants were able to recall both the personal circumstances in which they heard the news and several factual details concerning the Pope's death. The ability to retrieve this kind of information may be explained by the very short time that elapsed between the occurrence of the event and the data collection. All participants completed the questionnaire within six days after the Pope's death. As shown by previous studies

using similar delays (e.g. Christianson & Engelberg, 1999), people tend to report vivid memories of hearing newsworthy events shortly after they occur. Nevertheless, it is important to remember that the present study was based on a single data collection and that we have no information on the maintenance and consistency of the participants' recollections. In order to better understand this issue, flashbulb and event memory for the Pope's death should be assessed using a test-retest approach. We are currently moving in this direction.

In accordance with our hypothesis, the respondents' religious involvement had a significant effect on several psychological responses to the Pope's death. Comparisons between the four religious groups demonstrated that the higher the religious involvement, the higher the importance and consequentiality ascribed to the event. Moreover, participants in the high and moderate religious groups reported having felt interest and negative emotional reactions more intensely than participants from the low religious and the atheist group, whereas the latter reported more boredom. Furthermore, a positive relationship between religious involvement and both event memory and frequency of mass media exposure was observed. In short, we found evidence that the extent of personal involvement plays an important role in the psychological response to newsworthy events. The Pope's death had the strongest impact on the most religious participants of our sample, whereas participants from the atheist and the low religious involvement group reported less intense reactions overall.

While no gender differences were found, age significantly affected the reactions to the Pope's death. In particular, the lower the age of participants, the higher the tendency to consider the Pope's death as having consequences for their personal life. Likewise, we found that the lower the age, the higher the intensity with which participants felt interest and several negative emotions. This indicates that the news of

the Pope's death had a greater cognitive and emotional impact among younger participants than among those who are older. One possible explanation could be the large number of young people that Pope John Paul II had among his followers. Regarding this point, it is noteworthy that the Pope was very sensitive to the problems of adolescents and young people and paid a great deal of attention to them. Instituting World Youth Day, an annual international meeting attracting thousands of young people from around the world, is one example. This meeting has taken place three times in Italy since 1984, and more than 2,500,000 people were involved in the Great Jubilee celebration in 2000. An alternative explanation of the effects of age on the psychological reactions to the death of the Pope could be traced back to certain changes in the emotional processes during life span. In the emotion literature, there is agreement that affect regulation becomes more efficient in old age (Gross, Carstensen, Pasupathi, Tsai, Skorpen, & Hsu, 1997; Lawton, 2001). Accordingly, it could be that the older participants of our study felt less intense negative emotions than the younger ones because personal resources to cope with loss and shocking events increase with age.

In conclusion, the religious group differences that were observed are consistent with previous findings from the flashbulb literature which demonstrate that personal involvement influences psychological reactions to relevant public events (e.g. Luminet et al., 2004). However, it is also worth noting that the Pope's death had a strong psychological impact even though it was highly expected. Since previous studies have mainly focused on unexpected public events, an issue for future research is to identify the factors that enhance event and autobiographical memory in absence of the surprise effect.

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*Notes*

<sup>1</sup> The two items “faithful” and “church-goers” were highly correlated ( $r = .73, p < .01$ ).

<sup>2</sup> For this analysis, false answers and the alternatives “I do not remember” and “I do not know” were included in a single category.

<sup>3</sup> This two-step data analysis strategy allowed us to assess religious involvement group differences by controlling for the effect of age.

Table 1

*Percentages of Correct Answers regarding Memory for the Original Event by Religious Involvement Group*

Event-related details	Atheist	Low religious	Moderate religious	High religious	Total
Date	86.8	86.8	94.9	96.8	92.8
Day	92.1	88.7	98.1	96.8	94.9
Time	61.8	60.4	78.2	82.4	73.8
Cause	60.8	60	64.9	70.3	65.2

Table 2

*Means and Standard Deviations for Importance and Consequentiality Scores by Religious Involvement Group*

Religious involvement group	Importance	Consequentiality
	<i>M (SD)</i>	<i>M (SD)</i>
Atheist	4.35 (3.18)	1.57 (2.20)
Low religious	5.97 (2.45)	2.00 (2.22)
Moderate religious	7.58 (2.15)	3.76 (2.91)
High religious	8.66 (1.62)	4.95 (2.96)
Overall mean	7.10 (2.70)	3.42 (2.99)

Table 3

*Emotional Reactions to the Pope's Death by Religious Involvement Group: Mean Scores, Standard Deviations and Comparisons Between Groups*

Emotional reaction	(A) Atheist <i>M (SD)</i>	(L) Low religious <i>M (SD)</i>	(M) Moderate religious <i>M (SD)</i>	(H) High religious <i>M (SD)</i>	Post-hoc comparisons <sup>a</sup>
Sadness	3.75 (2.99)	5.85 (2.81)	7.74 (2.52)	8.07 (2.41)	H > A, L; M > A, L; L > A
Interest	5.29 (3.18)	5.56 (2.73)	6.60 (3.05)	6.85 (3.41)	H > A, L; M > A
Fear	0.59 (1.79)	0.74 (1.65)	1.58 (2.51)	1.66 (2.86)	H > A, L; M > A, L
Anxiety	0.78 (2.04)	1.35 (2.38)	2.67 (3.13)	2.84 (3.49)	H > A, L; M > A, L
Anger	0.55 (1.35)	0.42 (0.97)	1.10 (2.27)	1.22 (2.58)	H > A, L; M > L
Guilt	0.38 (1.48)	0.42 (1.34)	1.13 (2.13)	0.92 (2.27)	H > A, L; M > A, L
Boredom	1.00 (1.95)	1.00 (2.11)	0.69 (2.11)	0.25 (1.32)	A, L > H
Embarrassment	0.22 (0.95)	0.49 (1.53)	0.72 (1.86)	0.61 (1.65)	n.s.
Happiness	0.86 (1.96)	0.40 (1.25)	0.41 (1.31)	0.72 (1.98)	n.s.

*Note.* A = Atheist; L = Low religious; M = Moderate religious; H = High religious; n.s. = not significant.

<sup>a</sup> Post-hoc comparisons were performed on the non-standardized residuals computed for the various emotional reactions. Groups differed significantly at  $p < .05$  by the Bonferroni post-hoc test.