The MacArthur Adjudicative Competence Study: A Comparison of Criteria for Assessing the Competence of Criminal Defendants

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A set of measures assessing competence-related abilities was administered to three groups of criminal defendants: a group committed for restoration of competence, a group identified by jail personnel as mentally ill but not incompetent, and a group without identified mental disorder. Data from this study were used to test key assumptions bearing on the legal criteria for adjudicative competence. The data show that among defendants able to understand the nature and purpose of the criminal proceedings, a significant proportion have an impaired ability to appreciate their situations as criminal defendants or to communicate relevant information to counsel; among defendants able to understand the proceedings and to assist counsel, a significant proportion have impaired decision-making abilities; and among defendants able to understand the nature and consequences of decisions to plead guilty or waive a jury, a significant proportion have impaired abilities to appreciate the significance of these decisions or to rationally manipulate information pertinent to making them. These findings highlight the importance of disaggregating the components of adjudicative competence.

Appellate decisions and scholarly commentary indicate that competence adjudication in criminal cases serves three conceptually independent social purposes. The dignity of the criminal process is undermined if the defendant lacks a basic moral understanding of the nature and purpose of the proceedings against him or...
her. The accuracy or reliability of the adjudication is threatened if the defendant is unable to assist in the development and presentation of a defense. Finally, to the extent that decisions about the course of adjudication must be made personally, by the defendant, he or she must have the abilities needed to exercise decision-making autonomy. Keeping in mind these three rationales for competence adjudication, and drawing on the language of Dusky v. United States and other appellate decisions that interpret and apply Dusky, it is possible to specify the competence-related abilities required for adjudicative competence.

Adjudicative competence encompasses two related but separable components. The first component refers to a foundational “competence to assist counsel.” The minimum conditions legally required for participating in one’s own defense generally include the capacity (1) to understand the charges and the basic elements of the adversary system, (2) to appreciate one’s situation as a defendant in a criminal prosecution, and (3) to relate pertinent information to counsel concerning the facts of the case. These abilities, taken together, operationalize Dusky’s requirement that the defendant be able “to consult with counsel with a reasonable degree of rational understanding.” The competence-to-assist-counsel component of adjudicative competence, as we have conceived it, serves the dignity and accuracy rationales mentioned above, and the law clearly precludes any adjudication adverse to a defendant who lacks the abilities required to assist in his or her own defense. This is why we refer to competence to assist counsel as a foundational component of adjudicative competence.

The second component of adjudicative competence is “decisional competence,” because a defendant who is competent to assist counsel may not be competent to make the specific decisions regarding the defense of his or her case that are encountered as the process of criminal adjudication unfolds. Decision making clearly involves cognitive tasks in addition to those required for assisting counsel, but the abilities required to establish decisional competence have not yet been definitively established. The Supreme Court’s decision in Godinez v. Moran acknowledged the significance of decisional competence, holding that a defendant’s trial competence and competence to plead guilty should be addressed under a single standard (the Dusky standard) and that the defendant’s decision-making abilities are encompassed within that standard. However, the Court did not articulate which abilities are required for decisional competence in criminal adjudication. Existing case law reflects four possible criteria that may be invoked in determining decisional competence: (1) the capacity to understand information relevant to the specific decision at issue (understanding), (2) the capacity to appreciate one’s situation as a defendant confronted with a specific legal decision (appreciation), (3) the capacity to think rationally about alternative courses of action (reasoning), and (4) the capacity to express a choice among alternatives (choice).

Disaggregating competence-related abilities in this way provides a conceptual foundation for empirical research on the
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theory and practice of competence adjudication as well as for the development of structured assessment protocols designed to improve the practice of competence assessment and adjudication. Based on this conceptual reformulation, the MacArthur Research Network on Mental Health and the Law developed the MacArthur Structured Assessment of the Competencies of Criminal Defendants (MacSAC-CD). Findings from the MacArthur Adjudicative Competence Study pertaining to the reliability and validity of the MacSAC-CD as measures of the competence-related abilities are presented elsewhere. In this article, we use data from the MacArthur Adjudicative Competence Study to test the key assumptions underlying the theory of adjudicative competence previously summarized.

One key empirical assumption is that competence to assist counsel encompasses three different abilities (ability to understand information relating to the charges and the criminal process, to appreciate one’s situation as a defendant, and to consult with counsel about the facts of the case) and that impairment of one of these abilities does not necessarily entail impairment of the others. This assumption underlies the normative claim, embedded in Dusky itself, that each of these abilities is prerequisite to a finding of adjudicative competence. A second assumption is that decisional competence encompasses abilities not required for competence to assist counsel, regardless of how rigorously decisional competence is defined. This assumption underlies the normative claim that criteria of adjudicative competence must be more demanding in a system that allocates important decision-making prerogatives to the defendant as compared with a system that allocates all decisions to counsel.

As noted above, the requirement of decisional competence can be defined more or less inclusively, encompassing abilities to make a choice, to understand the nature and consequences of a given decision, to appreciate the significance of the decision in one’s own care, and to reason about information pertinent to the decision. Bonnie argued that the requirements of decisional competence should be defined contextually, pointing out that courts have actually enunciated different criteria of decisional competence in different contexts. Regardless of the validity of Bonnie’s normative claims, however, the underlying empirical assumption is that the use of different criteria of decisional competence would yield different outcomes.

In sum, this article uses the data from the MacArthur Adjudicative Competence Study to test three key empirical assumptions bearing on the law of adjudicative competence. First, competence to assist counsel, as usually defined, encompasses three different abilities, and significant impairment on one ability does not necessarily entail impairment on others. Second, defendants who are competent to assist counsel may nonetheless lack decisional competence. Third, whether a defendant lacks decisional competence depends on what decision-making abilities are being assessed.
Methods

Participants Hoge et al.\textsuperscript{6} describe in detail the characteristics of the male participants in Florida and Virginia from whom the data were gathered to perform the reliability and structural analyses of the MacSAC-CD. Selection criteria included the following: the defendant must be in the 18 to 65 age range and must have a prorated verbal IQ $\geq 60$. For the current analyses, three groups were contrasted, as described below.

Hospitalized Incompetent-Clinically Validated Group The Hospitalized Incompetent group (HI, $n = 159$), as described by Hoge et al.,\textsuperscript{6} was recruited from among criminal defendants who had been committed to public sector forensic inpatient units in Virginia and Florida for restoration of competence to stand trial. Subjects were interviewed within 10 days of admission (mean, 6.1 days, SD = 2.8 days). Studies repeatedly have found that defendants can be referred for restoration of competence for reasons that have little to do with whether they are regarded, clinically or legally, as incompetent to proceed to adjudication (e.g., to obtain mental health treatment, to determine the feasibility of mounting an insanity defense, to assist in plea bargaining).\textsuperscript{7,8} For the current analyses, we desired a group of defendants who were both hospitalized for restoration of competence to stand trial and perceived by their treating clinicians as genuinely incompetent. Therefore, we created the Hospitalized Incompetent-Clinically Validated group (HI-CV, $n = 70$) by removing from the HI group all defendants ($n = 89$) who were not rated as either “moderately incompetent” or “grossly incompetent” by their treating clinicians in the forensic hospital.

Jail-Treated Group The Jail-Treated group (JT, $n = 113$) was recruited from criminal defendants in three jails, two in Florida ($n = 55$), the third in Virginia ($n = 58$). Subjects were recruited from among defendants who had been identified by jail personnel as mentally disordered and who were currently receiving mental health treatment. The defendants in this group, while regarded as mentally disordered, had not been identified as incompetent.

Jail-Screened Group The Jail-Screened group (JS, $n = 87$), by removing from the JU group one defendant with a recorded diagnosis of schizophrenia as well as six
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defendants with a total Brief Psychiatric Rating Scale (BPRS) score of 40 or higher. BPRS scores above this cut-off “commonly are associated with need for inpatient treatment” p. 153. The rate of serious disorder found in the JU group (6 of 94 = 6.4%) is similar to that reported by Teplin9 in the leading epidemiological study of male jail detainees (6.1%).

Measures of Dependent Variables
The current study employed the MacSAC-CD. The content of the instrument and methods for scoring it are described in detail by Hoge et al.6 and, therefore, will only be summarized briefly here. The MacSAC-CD includes measures of two components of adjudicative competence: competence to assist counsel and decisional competence.

Competence to Assist Counsel (CAC)
Competence to assist counsel refers to the three minimum conditions that are legally required for participating in one’s own defense: (1) the capacity to understand the charges, the nature and purpose of criminal prosecution, and the basic elements of the adversary system; (2) the capacity to reason with information about the case; and (3) the capacity to appreciate one’s situation as a defendant in a criminal prosecution.2

The measure of the defendant’s capacity to understand the pertinent aspects of a criminal prosecution, Competence to Assist Counsel: Understanding (CAC:U), encompasses the defendant’s understanding of (1) the basic characteristics of criminal prosecution and defense, (2) the role of the judge and the jury, (3) the nature of criminal charges, (4) the nature of a guilty plea, and (5) the consequences of a conviction. The CAC:U consists of seven items relating to the facts of a vignette involving a hypothetical criminal prosecution. The paraphrase and true-false responses to each item are summed to generate an item score of 0 to 4. Thus, the aggregate CAC:U scores range from 0 to 28.

The measure of the defendant’s capacity to recognize and relate pertinent factual information to counsel, Competence to Assist Counsel: Reasoning (CAC:R), requires defendants to determine which facts among those presented are relevant to the defense of a hypothetical person’s criminal case. In each item, defendants are presented two pieces of information and asked to choose which of the alternatives would be relevant to the defense and should therefore be conveyed to the defense attorney. There are six items, generating scores of 0 to 2 points each; therefore, the CAC:R generates scores ranging from 0 to 12.

The measure of the capacity to appreciate one’s situation as a defendant in a criminal prosecution is Competence to Assist Counsel: Appreciation (CAC:A). The CAC:A focuses on the defendant’s own legal case rather than on a hypothetical vignette. The CAC:A assesses six beliefs relating to (1) the criminal charges, (2) the likelihood of conviction, (3) the impartiality of the adjudication process, (4) the possible helpfulness of the defense attorney, (5) the possible benefits of disclosing information to the defense attorney, and (6) the severity of punishment. Each item can be scored 0, 1, or 2; a score of 0 is assigned when the defendant’s reasons for his or her beliefs
are facially implausible and suggestive of mental disorder. The index from the CAC:A that we report here is whether a subject receives a score of 0 on any of the six items.

Decisional Competence Decisional competence refers to the ability to make the specific decisions regarding the defense that are encountered in the process of criminal adjudication. Several capacities may be relevant: (1) the capacity to understand information relevant to the specific decision at issue, (2) the capacity to weigh and consider information to reach a decision, (3) the capacity to appreciate one’s situation as a defendant confronted with a specific legal decision, and (4) the capacity to express a choice among alternatives. The two most commonly encountered decisions in criminal cases are whether or not to plead guilty and whether or not to waive a jury and request a bench trial. Therefore, we constructed instruments measuring understanding relevant to these two decisions.

The measure of the defendant’s capacity to understand information specific to the decision of whether or not to waive the constitutional right to a trial by jury and instead request a bench trial. Decisional Competence: Understanding-Waiving Jury (DC:U-WJ), also focuses on the defendant’s understanding of five topics: (1) the distinction between a trial by judge and a trial by jury, (2) the constitutional right to a jury trial and prerogative to waive this right, (3) the participation by the defense in jury selection, (4) plausible reasons for choosing a trial by judge, and (5) plausible reasons for choosing a trial by jury.

The DC:U-PG and the DC:U-WJ are structured like the CAC:A and include paraphrase and true-false response formats that are summed to form an item score of 0 to 4. The DC:U-PG consists of five items and thus generates total scores ranging from 0 to 20. The DC:U-WJ contains six similarly scored items, which generate total scores ranging from 0 to 24.

Our measure of the capacity to think rationally about alternative courses of action in making decisions about criminal defense, Decisional Competence: Reasoning (DC:R), is modeled closely on the Thinking Rationally About Treatment (TRAT) measure developed by Grisso and Appelbaum, which assesses the capacity to think rationally about alternative courses of action in making decisions about mental health treatment. The measure addresses the defendant’s capacity (1) to request information needed to make a decision, (2) to conceive the primary legal effects of alternatives, (3) to conceive the personal consequences of the alternative outcomes, (4) to compare alternative choices, (5) to assign relative
values to alternatives in a consistent way, 
(6) to think transitively (i.e., if A > B and 
B > C, then A > C), and (7) to think 
using probabilities. The DC:R contains 
13 items and generates scores ranging 
from 0 to 26.

The measures of appreciation in deci-

sion making, the Decisional Competence:
Appreciation-Pleading Guilty (DC:A-
PG) and Decisional Competence: Appre-
ciation-Waiving a Jury (DC:A-WJ), like 
the CAC:A assess the defendant's ability 
to appreciate his or her own situation. The 
DC:A-PG and the DC:A-WJ each con-
sists of a single item, scored 0, 1, or 2, 
and are combined to form a single DC:A 
measure: the index from the DC:A that 
we report here is whether a subject re-
ceives a score of 0 on either of the two 
items. reflecting a clinical judgment that 
the defendant's reasons for his beliefs are 
facially implausible and suggestive of 
mental disorder.

Finally, the index of capacity to evi-

dence a choice, Decisional Competence: 
Choice (DC:C), requires merely that the 
subject be able to choose among alterna-

tive options. Subjects who are able to 
choose an alternative option score two 
points: subjects who are unable to choose 
receive zero points.

Cut-Offs for “Impairment” We 
chose a conservative decision rule for 
classifying performance as impaired. We 
did this in order to minimize the pro-
portion of defendants in the JS group—
the “normal” subjects—who would be 
deemed impaired on our instruments. Per-
formance on our measures was classified 
as “impaired” if it fell at or below two 
standard deviations below the mean score 
of the Jail-Screened (JS) group. Using 
these criteria, the cut-offs for impairment 
on the competence to assist counsel mea-

ures were as follows: CAC:U ≤ 15; and 
CAC:R ≤ 5. For the decisional compe-
tence measures, the cut-offs for impaired 
performance were: DC:U-PG ≤ 11; DC: 
U-WJ ≤ 13; and DC:R ≤ 8. For either of 
the appreciation measures (CAC:A and 
DC:A), performance was regarded as im-
paired if the subject scored 0 on any item. 
Few subjects (n = 10, or 2.7% of the 
sample) failed to achieve other than the 
maximum score on the choice measure 
(DC:C); therefore, this measure is not dis-
cussed further.

Results

Table 1 presents the percentage of sub-
jects in each group that scored in the 
impaired range on each of the Mac-
SAC-CD measures. The proportion of 
subjects scoring in the impaired range 
varies substantially across the groups in 
the expected direction. The differences 
among the groups are highly significant 
for any CAC measure ($\chi^2 (2,267) = 
85.61, p \leq .000$); for any DC measure ($\chi^2 
(2,262) = 77.43, p \leq .000$); and for any 
CAC or DC measure ($\chi^2 (2,265) = 86.67, 
p \leq .000$). For each measure, the HI-CV 
groups had the highest proportion of sub-
jects scoring in the impaired range: the JS 
group had the lowest. The percentage of 
defendants that scored in the impaired 
range on at least one of the competence-
to-assist-counsel (CAC) measures was 
4.7 in the JS group, 24.8 in the JT group, 
and 74.6 in the HI-CV group. The per-
centage of defendants that scored in the 
impaired range on at least one of the
Table 1

<table>
<thead>
<tr>
<th>Impairment Measures</th>
<th>HI-CV n = 70</th>
<th>JT n = 112</th>
<th>JS n = 87</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAC:U</td>
<td>55.7</td>
<td>19.6</td>
<td>2.3</td>
</tr>
<tr>
<td>CAC:R</td>
<td>32.9</td>
<td>6.4</td>
<td>0</td>
</tr>
<tr>
<td>CAC:A</td>
<td>41.8</td>
<td>8.0</td>
<td>3.5</td>
</tr>
<tr>
<td>Any CAC</td>
<td>74.6</td>
<td>24.8</td>
<td>4.7</td>
</tr>
<tr>
<td>DC:U-PG</td>
<td>50.0</td>
<td>13.6</td>
<td>3.4</td>
</tr>
<tr>
<td>DC:U-WJ</td>
<td>42.9</td>
<td>8.2</td>
<td>3.4</td>
</tr>
<tr>
<td>DC:R</td>
<td>40.6</td>
<td>1.8</td>
<td>2.3</td>
</tr>
<tr>
<td>DC:A</td>
<td>38.1</td>
<td>7.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Any DC</td>
<td>67.0</td>
<td>16.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Any CAC or any DC</td>
<td>87.3</td>
<td>28.0</td>
<td>10.6</td>
</tr>
</tbody>
</table>

HI-CV, hospitalized incompetent-clinically validated; JT, jail-treated; JS, jail-screened; CAC, competence to assist counsel; DC, decisional competence; U, understanding; R, reasoning; A, appreciation; PG, pleading guilty; WJ, waiving jury.

decisional competence (DC) measures was 5.8 in the JS group, 16.8 in the JT group, and 67.0 in the HI-CV group. The percentage of defendants that scored in the impaired range on at least one of the MacSAC-CD measures—CAC, DC, or both—was 10.6 in the JS group, 28.0 in the JT group, and 87.3 in the HI-CV group.

Table 2 shows the percentage of defendants that scored in the impaired range on various combinations of criteria for both of the components of adjudicative competence. In the HI-CV group, for competence to assist counsel, the reasoning measure (CAC:R) adds slightly to the understanding measure (CAC:U), increasing the percentage of defendants that have impaired performance from 55.7 percent to 60.0 percent. Adding the appreciation measure (CAC:A) has a much more substantial effect in increasing the percentage of defendants that score as impaired (from 55.7% to 71.6%).

For decisional competence among the HI-CV group, a similar picture appears. A combined decisional competence understanding measure (DC:U) adds little to the CAC measures (increasing the percentage of defendants that are impaired only from 74.6% to 76.1%), and the decisional competence reasoning measure (DC:R) adds only slightly to the percentage of defendants that scored as impaired based on the previous measures (from 76.1% to 77.6%). However, the decisional competence appreciation measure (DC:A) has a more substantial impact on the percentage of defendants that scored as impaired (increasing it from 77.6% to 85.7%).

Discussion

The analyses presented here reinforce the findings presented of Hoge et al.6 regarding the validity of the MacSAC-CD as measures of competence-related abilities. Of those defendants who were hospitalized for restoration of competence and were perceived by their clinicians as
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Table 2
Percentage of Defendants Who Scored in the Impaired Range Under Various Combinations of MacSAC-CD Measures*

<table>
<thead>
<tr>
<th>Impairment Measures</th>
<th>HI-CV n = 70</th>
<th>JT n = 112</th>
<th>JS n = 87</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAC:U</td>
<td>55.7</td>
<td>19.6</td>
<td>2.3</td>
</tr>
<tr>
<td>CAC:U + CAC:R</td>
<td>60.0</td>
<td>22.3</td>
<td>2.3</td>
</tr>
<tr>
<td>CAC:U + CAC:A</td>
<td>71.6</td>
<td>22.9</td>
<td>4.7</td>
</tr>
<tr>
<td>CAC:U + CAC:A + CAC:R</td>
<td>74.6</td>
<td>24.8</td>
<td>4.7</td>
</tr>
<tr>
<td>CAC:U + CAC:A + CAC:R + DC:U</td>
<td>76.1</td>
<td>25.7</td>
<td>7.0</td>
</tr>
<tr>
<td>CAC:U + CAC:A + CAC:R + DC:U + DC:A</td>
<td>85.7</td>
<td>28.0</td>
<td>8.2</td>
</tr>
<tr>
<td>CAC:U + CAC:A + CAC:R + DC:U + DC:A + DC:R</td>
<td>77.6</td>
<td>26.2</td>
<td>9.4</td>
</tr>
<tr>
<td>CAC:U + CAC:A + CAC:R + DC:U + DC:A + DC:R</td>
<td>87.3</td>
<td>28.0</td>
<td>10.6</td>
</tr>
</tbody>
</table>

* See footnote to Table 1 for definitions of abbreviations.

Includes both DC:U-PG and DC:U-WJ.

being incompetent (the HI-CV group). 87.3 percent scored as impaired on at least one MacSAC-CD measure. Considering that the MacSAC-CD is primarily a cognitive assessment device that does not attempt to tap all dimensions thought relevant to adjudicative competence (e.g., a defendant’s behavioral ability to conform his or her demeanor to standards appropriate for a courtroom, a defendant’s interpersonal ability to cooperate with a specific defense attorney), this high concordance between clinical judgments of incompetence and scores indicating impaired performance on the MacSAC-CD is further evidence of the construct validity of the research instrument.6

Turning now to the issue of primary theoretical interest, these data support the empirical assumptions underlying the MacArthur Working Group’s conceptualization of the components of adjudicative competence. First, the data show that ability to understand the charges and the proceedings, ability to understand one’s situation as a criminal defendant, and ability to communicate relevantly with counsel—as operationalized by the MacSAC-CD—represent three separable aspects of competence to assist counsel as defined by the Dusky standard. Defendants who are impaired on one of these abilities are not necessarily impaired on the others. In fact, among the hospitalized subjects regarded by hospital clinicians as incompetent for adjudication, about 19 percent were impaired only on appreciation (CAC:A) and/or on reasoning (CAC:R), even though their ability to understand the proceedings was unimpaired. To use the Dusky language, a significant proportion of defendants found to be incompetent to proceed showed impaired ability “to consult with counsel with a reasonable degree of rational understanding” even though their “factual understanding” of the proceedings was adequate.3

Second, the data also show that competence to assist counsel does not necessarily predict or entail decisional competence. About one-fourth of the defendants who were rated as incompetent by hospital clinicians scored “unimpaired” on all
of the MacSAC-CD measures of competence to assist counsel. Among this group, however, about half (12.7\% of the entire HI-CV sample) showed impairment on one or more of the MacSAC-CD measures of decisional competence. Similarly, among the unscreened jailed defendants (the JU group), 5.7\% were impaired on one or more decisional competence measures even though they were unimpaired on any of the competence to assist counsel measures: this represents about half (47\%) of the impaired JU defendants.

Finally, defendants impaired on one decision-making ability (understanding, appreciation, reasoning) are not necessarily impaired on the others. For example, among hospitalized incompetent (HI-CV) defendants with unimpaired abilities to assist counsel and to understand the nature and consequences of decisions to plead guilty or waive a jury, almost half (representing 11.2\% of the entire group) had impaired abilities to appreciate the significance of these decisions or to rationally manipulate information pertinent to making such decisions. This finding echoes the finding by Grisso and Appelbaum\textsuperscript{11} that, among schizophrenic patients with unimpaired ability to understand treatment-related information, 24.1\% had impaired performance on appreciation and 14.8\% had impaired performance on reasoning.

The findings presented in this article show that the MacSAC-CD measures can be used to inform policy judgments concerning the criteria for adjudicative competence. Although the abilities required for competence to assist counsel seem to have been well settled under \textit{Dusky}, the meaning of the \textit{Dusky} formula, as applied to decision making, has not yet been clarified. Additional data on the nature and prevalence of impaired decision-making abilities among criminal defendants are needed to inform this discussion. In addition, the distribution of performance on measures of competence-related abilities among clinical defendants with and without mental disorders can help to inform policy judgments concerning the degree of impairment that should be characterized as “deficient.” In saying this, we do not mean to imply that competence adjudication should be viewed as a mathematical task; judgments of incompetence must ultimately be based on case-by-case value judgments. However, the MacSAC-CD measures can provide a valuable empirical tool for estimating the aggregate effects of adjusting the threshold of competence in one direction or the other. In future research with larger sample sizes, it would be possible to analyze the combined effects of varying the components of adjudicative competence and of raising or lowering the cut-off scores for “presumptive impairment.” Eventually, this strategy could also be usefully employed in the task of providing norms and clinical guidelines for administering the clinically portable version of the MacSAC-CD measures, the MacArthur Competence Assessment Tool-Criminal Adjudication (MacCAT-CA), which is now being developed.*

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inal Adjudication (MacCAT-CA): introduction and preliminary research findings. Submitted for publication.